10/774,355 10/26/04

```
acettetece teccetacty tygacecaat yttattyate aettettety tyacatyeea 5'40
ccaqtcatqa qactqtcctq cactqactac catctcactq aqqaqqtqqq ctttqctqtc 600
agtagttgca ttgtcatgag ctcatttgtc ctcacagtgg tctcctatat tggcattgtg 660
gccacagttc ttcgcatccc ctcagtagaa ggc
<210> 967
<211> 924
<212> DNA
<213> Mus musculus
<220>
<223> MOR285-3P
<400> 967
atggagtcag gaaaccgcag ctgtgggaca gacttcacct tggttggtct tttccaggat 60
ggacacatgg acacetteet etteacagte atetecatee tetttgeagt ggeteteata 120
ggcaacatca cactggtcat cctcatcagg ctggaccaaa gactccacac ccccatgtac 180
tttctcctca gccagctctc catcatggac atgatgtaca tctccaccac tgtgcccaag 240
atggcageta acttectete agacaceaag gecattteet ttetgggetg tgtgateeaa 300
accttttgtg tttctgaccc tgggtggggt ctgaagccct cctgctgggc tttcatgtcc 360
tatggacagg tatatagcca tctgccgacc cttgcactac ccctgtgttc atgagcaggg 420
aagatetget geteeatggt egetggtgee tggageagea geteeateae tgeateagtg 480
cacacagtgt atgtgtttca acttccattc tgtggctcta ggatggttaa ccactttttc 540
tgtgaggttc catctctcct qccactggtg tgtgaagaca cgtcccagta tgagcataca 600
gtcctcgtga gtggacttgt cattctgatg ctccccttcc tggccatcct agcttcctat 660
geteggatet tggttgttgt acteeagatg ggtteaggge agggaeagag tagagetgtg 720
tecacetget ceteacacet gaetgtggee ageetgttet atgteaceae tetetecace 780
tacacccage cacacacett geattetect ggaagggaca aagtggtgge tgtgetetae 840
tcaatcgtca cccctgttct gaacccattc atctacagcc tgaggaacaa ggaggtcatg 900
ggagccctga ggagacaaat gaaa
                                                         924
<210> 968
<211> 921
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (396)...(812)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR256-37P
<400> 968
atggacccaa gcaattacag tactttgcat gtttttatcc tgcttggatt ctctgaccac 60
cctcacctgg aaatgatect ctctggagtt gtcaccttct tttacattat tacactggtg 120
ggtaacactg ctataattct tgcatccctc ctggatcccc atctccatac accaatgtac 180
tttttcctca qqaatctatc tttcctqqat ttqtqtttca caacaaqcat tqtccctcaq 240
atgctggtta acttgtgggg acccgaaaag accattagct ctgtgggctg tattgttcag 300
ctctatgtgt atatgtggct gggctccatt ggagtgtctg ctcctagctg tcatgtccta 360
tggatcgttt cacaqctatt tgtaaqccct tgcatnnnnn nnnnnnnnn nnnnnnnnn 420
```

```
nnnnnnnn nnnnnnnnn nnnnnnnnn nncactccaa gtctcaaccc cctcatttac 840
accctaagga acagagacat gaaagatgca ctgaaaaaac tcatgaggtt ttaccacaga 900
tttgccgaag taaggagaaa c
                                                                921
<210> 969
<211> 934
<212> DNA
<213> Mus musculus
<220>
<223> MOR174-15P
<400> 969
agtatctatg aaaaccagag ttctacagtg acattcatcc tcgtgggctt ctcagaatac 60
ccagacatcc agttqcccct gttcctcctg ttcctgacca tatacacagt cactgcgctg 120
gggaacctgg gcatgattgc catcatcaga cttagcccta agctccacac tcccatgtat 180
tttttttctta gtcatctctc ctttgtggat ttctgttact ccactgttgt cacaccaaag 240
ctcttagaaa acttgattgt ggaagacaga aaagatctcc ttcacaggct gtgtcatgca 300
attettettt qeatgeatat ttgtggtgae agaaacatte atgttggeag tgatggeeta 360
tgacagattt gtggcagtat gcaaccccct cctctacaca gtggctatgt ctcagaagct 420
ttgctggtcc ctggtagcag gatcctattc atggggtata atctgttcct ttgtattcat 480
acgttttatg ttgaccttgg tcttctgtgg gaccaagttc ataaataact ttgtgtgtga 540
gcatgatgcc attgtcgctg tatcctgctc tgacccctac attagtcaga aggtcatttt 600
catctttgca actttcaatg agctaagcag tctgatgatc attctcacct cttatgtttt 660
cattgtcatc actgtcatga aaatgcctac cactggaggg cgctacaaag tcttctccac 720
ttgtgcctcc catctcacta ccatcactat tttccatagc attatcatct gtctctactg 780
tgttcccact accaaaagtt cttggctttt ggtcaaggtg gcttcagtct tctacacagt 840
tgtcatcccc atgctgaacc cactaatata cagtctcagg aacaaggatg tgaaggatgc 900
agttaagaaa ctaatgtgtt cttctttgtc atca
                                                                934
<210> 970
<211> 814
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (261)...(280)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR225-8P
<400> 970
atggaatgcc agaggaacat atcagaattt cttcttatgg ggctatcttc caagcagaac 60
actgaagtat tttgcttcat gttcttctta ttctgctact ttaccatctt gtcttggaat 120
ctcctgatcc ttttctcaat tagggggcag ttctctgttc aaccaaccct atgtactatt 180
tecteagtea titageatet atggaeatet getataeete etgtgtgaea eecaaattga 240
ttgggggatc tgcttgccga nnnnnnnnn nnnnnnnnn ctccactaca tggtcatcat 300
gagcagaaac agatgccatg tttttatctg ggcttcctgg gttggtggtg ttgcccactc 360
ctttccccag gttatgatgc tagtctgttt gcccttctgt ggacccaatg aaatagacca 420
ctacttctqt gatqttttcc ctttqctqaa aattqcttqc actqatacct acatcattqq 480
tgtcctcatg gttgccaatt caggaatggt tgcctctgtt atctttgttc tcttgtttgg 540
ttcatatgta gttatactgt tcacattaag gaattactca gcagaaggga gacgcaaagc 600
tettteaace tgtgggteee acatetetgt ggttatttta ttetttggat etaceatett 660
tgcctacctt agacctccta ccactttccc tgaagacaaa atctttgcac tgttttacac 720
```

```
tatcattqct cctatqttca acccctcat atatactcta agaaataaag agatgaagac 780
tgccataaag aaggtttggt gtcagatgtc attt
                                                         814
<210> 971
<211> 925
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (175)...(413)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR225-9P
<400> 971
atggaatgca agaggaacgt atcagaattt cttcttatgg ggctatcttc caagcagaac 60
actgaagtat tttgcttcat tttcttctta ttctgctact ttaccatctt gtcttggaat 120
ctgctgatcc ttttctcaat tagatgcagt tcttctgttc aaccaaccta tgtannnnnn 180
ctgggcttcc tgggttggtg gtgttgccca ctcctttccc caggttatga tgctagtctg 480
tttgcccttc tgtggaccca atgaaataga ccactactac tgtgacgttt tccctttgct 540
gaaagttqct tqcactqata cctacatcat tqqtqtcctc atqqttqcca attcqqqaat 600
ggttgccttt gttatctttg ttctcttgtt tggttcatat gtagttatac tgttcacatt 660
aaggaattac tcagcagaag ggagacgcaa agctctttca acctgtgggt cccatatatc 720
tgtggttatt ttattctttg gaccttccat ctttgtctac cttagacctc ctaccacttt 780
ccctgaagac aaaatctttg cactgtttta cactatcatt gctcctatgt tcaaccccct 840
catatatact ttaagaaata cagagatgaa gagtgccata aagaaggttt ggtgtcaggt 900
gacattttta qqaqaaaaac acaat
<210> 972
<211> 354
<212> DNA
<213> Mus musculus
<220>
<223> MOR230-9
<400> 972
ggtattgttg tgacagccaa cagtggcacc attgcattgg gaagttttgt catcttgctg 60
atctcataca cagtcattct catgtctctg agaaagcagt catctgaagg cagacgcaaa 120
gctctctcca cttgtggatc ccacattgct gttgtcatca ttttttttgg cccctgtact 180
tttatgtata tgcggcctga cactaccttc tctgaggaca agatggtagc tatattttac 240
actattatca ctcccatgct gaatcctcta atttacactc taagaaatgc agaagtaaag 300
aatgcaatga gaaaactgtg ggctagaaag ttttcctggg aaactactgg gaaa
<210> 973
<211> 367
<212> DNA
<213> Mus musculus
<220>
<223> MOR230-10P
```

```
<400> 973
atgcataaca acaqtatqac tqaatttatt ttgttgggat tgactcagga tccagaacaa 60
cagaaggcaa tatttggagt cttcttgatt ctttacctta tgactttaat agggaacttt 120
ctcatcatgg tgaccattaa gatgagtcag acacttggga gtcccatgta cgttttcctc 180
ttctatttgt ctttcgctga tgcttgcttc tctacaacta cagcacctag attgattgtg 240
aatgeeetet eacagaaaaa aattatttee tacaatgaaa tgtatgaete aggtetttge 300
ageteaette tittgggtgea tggagatett egtgettate eteatggeea ttgaeegeta 360
                                                                  367
tgtagca
<210> 974
<211> 927
<212> DNA
<213> Mus musculus
<220>
<223> MOR146-6P
<400> 974
atggaaccat ataatttaac aggaacctta gaattcattc tccttggact ctcagaagac 60
cctgaactgc agetcatett atttgcacta ttcatgetca tatacetget caetgtgett 120
ggaaatgttc tcatcatctt ggccatcagc tgtgattccc acctccacag cccaatgtac 180
ttcttcttct acaacctttc attgtctgac atgggcttca gcagcaccac catccccaaa 240
atgctgataa acttgcatgt ccataacaga tccataacat atgctgaatg cctaactcgq 300
gtatatttct tttttctttt tgggggtatg gacagcctat tgctggcttg tgatggccta 360
tgaccgatgg gtagctattt gtcgccctct acactaccaa gtcattctaa gccctcgcct 420
ctgtagatgt ttggtcatag tttccctttc cattagtctt gtgagttcac aggtacactg 480
cttgttggtg tcacaactaa cattttgtat taacgtagaa atccctcatt tcttttgtga 540
tgttccagaa cttgtaaaac ttgcttgttc taacactact atcaatgaca tagtcatgtt 600
tettttaage ateattgttg gttteettee tgeeteagga atattttaet eetaetataa 660
aattacttct tctattttta gagtaccatc actgttagca aaatataaag ccttctctac 720
ctgtggatct cacctgtcag ttgtttgcct attttatgga acaggtatag gagtttacct 780
caqttcaaca qtttctaqtt cttccaqqqa aaqtatqqtc qcttcqqtaa tqtatacaat 840
qqtqqttccc atqatqaacc cttcatttac aqcctqagqa acaqqqacat caaqaaatcc 900
                                                                   927
ctctggaaaa ttgtccatca gataaca
<210> 975
<211> 1581
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (594)...(613)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR0-7P
<400> 975
atgaatgata cattcattgt aactatgttt gcttatttcc aggtaaagac tgcaaatttt 60
atggagcaag aaaacatcac agctacttca atattcatcc ttctgggact ttcaaaagaa 120
actgatatcc agoctottgt atttgggctg ttoottttca tttacctggt ctgcatcaca 180
ggaaatatgc ttatcatcct gatcattacc tctgatgccc acctccagac tccaatgtat 240
ttctttcttt ctaacctatc ttttacagac atttgcttca tatccaccac agtccccaag 300
atgttagtga acatccagac acagaataaa tccataacat atgaaggctg ccttgctcag 360
atgtattttt tcatgttttt ttctggattg gatagtttgt tactgactgt aatggcgtat 420
```

```
gaccggtttg tggccatatg tcacccttg cactacatga ttgtcatgag ccctcacttg 480
tgtgttagtc tacttctact gtcttgccta atctgcctgg cctattcatt gttgcaaact 540
ttattttttt tttccatttt ttattaggta tttaactcat ttacatttcc aatnnnnnn 600
nnnnnnnnn nnngggcata taaagtttgc aagtccaatg ggcctctctt tccagtgatg 660
gccgactagg ccatcttttg atatatatgc agctagagtc aagagctccg gggtactggt 720
tagctcataa tgttgttcca cctatagggt tgcagatccc tttagctcct tggctacttt 780
ctctagetcc tccattggga gccctatgat ccatccatta gctgactgtg agcatccact 840
tctgtgtttg ctgggccccg gcatagtctc acaagagaca gctacatctg cgtcctttca 900
ataaaatett getagtgtat geaatggtgt cagegtttgg atgetgatta tggggtggat 960
ccctggctat ggcagtctct acatggtcca tcctttcatc tcagctccaa actccgtctc 1020
tgtaactcct tccatgggtg ttttgttccc aaatctaagg aggggcatag tgtccacact 1080
tcagtcttca ttctccttga gtttcatgtg ttgcaaactt taatgttttt gagggtgtct 1140
ttctqtaaga aaacaqaaat accccactac ttctqtqaac ttqctcaqat tctcaaqctt 1200
gcctgctcag acacatatgc caatgatatc ctgctttact gtgtaactgg tttactaggt 1260
attattcctc tgtctgggat tcttttttca tattctaaaa ttatcaactc tatagtgggc 1320
atttcatctg ctaggggtaa gtataaagcc ttttctactt gtggctctca tctttcagtg 1380
gtctcattgt tctatggcac aggccttggg gtctacctta cttctcaaat gtcctataaa 1440
tccagagagg gttcaatagc ctcggtgatg tatactgtgg ttactcctat gctaaaccct 1500
ttcatctaca gcctgaggaa caaggacttg aatcaggctc ttagaagatt ttttcacagc 1560
acaggagaca ggtttcggta g
                                                                  1581
<210> 976
<211> 327
<212> DNA
<213> Mus musculus
<220>
<223> MOR146-7P
<400> 976
atggaaccat ataatttaac aggaaccttq qaattcattc tccttqqact ctcaqagqac 60
cctgaactgc agctcatctt atttgcacta ttcctgctca tatacctgct cactatgctt 120
ggaaatgttc tcatcatctt ggccatcagc tgtgattccc acctccacag cccaatgtac 180
ttcttcctct acaacctttc attgtctgac atgggcttta gcagcaccac aatccccaaa 240
atgctgataa acttgcatgc acataagaga tccacaacat atgctgaatg cctaactcag 300
                                                                   327
gtatctttct ttattctttt tgggtgt
<210> 977
<211> 934
<212> DNA
<213> Mus musculus
<220>
<223> MOR131-2P
<400> 977
gtgagcagca ccaatcaata tagtgtctct gagttcatcc tcctggaact ctccaggcag 60
ccccagcagc agcagctcct cttcctgttc ttcctcatca tgtacctggc cactgtcttg 120
ggaaacctgc tcatcatcct ggccatcagc acagactccc gcctgcacac ccccatgtac 180
ttcttcctca qcaacctqtc ctttqtqqat qtatqcttct cctccaccat tqtccctaaq 240
gtactggcca ttcacatact cagaaatcaa gccattttgt actctgggtg ccttacacag 300
ctgtattttc tctgtgtgtt tgctgacgtg gacaatttcc tgctggctgt gatggcctat 360
qaccqatttq tqqccatatq ccacccttta cactacacaa caaaqatqac ccatcaqctq 420
tgtgcccttc ttgttgtggg gtcaggggtg gtagccaacc ttaattgtct gttgcacaca 480
ctgctcatgg cttgactctc cttctgtgag aactacatca tcccccactt cttctgtgat 540
gcgactcctc tcctgaaaat cttctgctca gatccacatc tcaatgatct gatgattcat 600
acagaaggaa ctatgatcat tgttacccca tttgtctgca tcctgatctc ctacatacac 660
```

```
atcacctatg caatcctgag agtctcatcc cataggggag gatggaaagc cttctccagg 720
tggctcacac ctggctgttg tgtgcttctt ctatggcacc atcatcactg agtattttaa 780
cccttcqtcc tctcactcaq ccaqqaqqqa catqacaqct qccatqatqt acacaqtqqt 840
gacccccatg ctgaaccctt tcatctacag cctggggagc agggtcatga aaaggggctt 900
taagaaaagt gcttaccatg aaatttatat ctaa
                                                                   934
<210> 978
<211> 928
<212> DNA
<213> Mus musculus
<220>
<223> MOR252-3P
<400> 978
atggetecag taaaccagte agttgtgace atgtteatee tgeaaaggtt tgttgatgae 60
cccaqqqtcc aqqatqttct cttctqcctc ttctttqcct tqttcqtqqc aqccataqct 120
ggcaatggcc tgatcatcgc gaccattcac agcagtccca acctccacac tcccatgtac 180
ttcttcctag tcaaccttgg ccctgatgga tgtgatctgc actgtgactg tcttgcctaa 240
agttctgcag agcctggtgg cagagaacag catatcttat gggggatgcc tcacacagat 300
gttcgtcttc tcctgggtcc tgggctctga gcttctgctt ttctctgcca tggcctatga 360
ccgctacctt gcaatctgtc ggccactgca ctatggcacc ctcatgagtg gcagggtctg 420
tgtggccctt gcaacctttg tgtggttcac tggagctttc aattcattgg tgctcacttg 480
tetgatgttg ceattgtett tetgtggtee caateteate acaeaettet tetgtgagat 540
cccttctqtq ttqatactqt cctqtaqtcc cacctttatc aatqacatca tqactqtcat 600
tgcagacatg ttcctgacag gcctgaactt tttattgaca atgacatcct atggcttcat 660
catttccagc atcctgcgca tccgctcagc tgagggcaag aagcgtgcct tctctacctg 720
ctctgcccac ctggttqtgg tcacacttta ttattccaca qttctttata cttatqtccg 780
gccagcccta ggaactgctg ggttcctgga caaactcatt gctgttctgt ataccactgt 840
gaccccatct ctgaaccccc ttatctatac tctgagaaac aaggaattca aaacatcctt 900
taaaaaactc atttccctct tgagaact
                                                                   928
<210> 979
<211> 568
<212> DNA
<213> Mus musculus
<220>
<223> MOR103-14P
<400> 979
ccgtttcgct acccagtcat catgagcccc ggtctctgca gccttcctgg ctggaggctc 60
ctggttgtct ggcttcacca tttccctggg gaaggtcttc ttcatttctc gtctaggcta 120
ctgtggcccc aacgtcatga accacttctt ctgtgatgtg tccccactac tcaaccttgc 180
ctgctctgac atgtcagttg cagagettgt agacttecte etggegetge teatettgtt 240
ggggccactg ctgttgactg tcttctccta cacggccatt ctcagcaccg tgctacgcat 300
gccctccgcc ggtggcaggc agaaggcctt ctccacctgc gcctcacacc tggccgtggt 360
ggtcatcttc tattcagctt ctctcttcat ctatgcccgg ccccgtgccc tctactcctt 420
cgactacaac aagcttgtgt ctgttgtcta cacagtgctc acacccctaa ttaaccccat 480
catctactgc cttcggaacc aagaggtcaa gcaagcgcta cataaggtac agcagcgagc 540
agcccaggtt ctaggcgcct cctcctag
                                                                   568
<210> 980
<211> 943
<212> DNA
<213> Mus musculus
```

```
<220>
<223> MOR204-27P
<400> 980
atggctttcc aggcggatgg aaaccacact acagtaacag agttcctttt gttaggctta 60
acagatgate cagtgettag agteateete tteaceatea teetgtgeat etaeetggta 120
actgtgtctg ggaacctcag caccatcctt ctcatcagag tctcttccca gctccatcac 180
cccatgtact ttttttctca gccacttggc ttctgtagac ataggcattt catcttctgt 240
tacacccaat atgettgtta actteetggt ggagagaaat accateteet acettggatg 300
gggcatacag ctcagctttg gtgatatctt tgggtcagtt gaatgttttc ttttggctac 360
catggcttat gatcgcttca tggcaatctg caacccactg ctttattcca ccaaaatgtc 420
cacacaagtc tgtgtccagt tggttgtggg atcttatata ggaggtcttc ttaatgcttc 480
ctttgctatg gtttcctttt tttcttttt attctgtggc tcaaatagag ttgaacattt 540
tttctgtgat tttgttcctt tagctgagct gtcctgttct gatatcagta tctccgtagt 600
tettgtttea ttttetgetg geteagttae tatgetaaca gtgtttatea tagteatete 660
ctattettae atecteatea ceatectaaa gatgegttee acggagggge gacagaagge 720
cttctccaca tgaacctccc atctcacage agtcactctg ttctatggga caatcacatt 780
tatttatgtg atgcccaagt ccaqcttctc tactaaccag aacaaggtgg tgtctgtgtt 840
ctacatggta gtcatcccca tgttgaatcc cctcatctac agcctcagaa ataatgagat 900
taaggatgct ctgaggagac atcttggtaa gaaaacactt tct
                                                                   943
<210> 981
<211> 928
<212> DNA
<213> Mus musculus
<220>
<223> MOR204-28P
<400> 981
ttggctttcc tagaggatgg gaaccacact atagtgacag agttcacttt actggactta 60
acagaagacc tagtccttag agtcatcctc ttcagcatca tcctgtgcat ctaccttgtg 120
totqtqtctq qcaacctcaq caccattctt ctcatcacac qctctatcac accatqtact 180
tttttctcag ccacttggct ctgttgacat gggcctttca tcttctgtca cacccaatat 240
gtttgtcaac ttcctgactg agagacatac catctcctac tttggatgtg gcatccagct 300
cagctcagct gctttctttg gggcagttga attcttcctt ctggctgtca tgacttatga 360
ttgcttgata gcgatctgaa acccactgct ttattccacc aaattgtcca cacaagtctg 420
tatctagttg gttgtaggat cttatgtagg cggtttcctt aacgcttcat ttgtgcccat 480
ttctttcttt cttttctttt ctatggacct aatagagtca atcacttttt ctgtgatttt 540
catcctatga tggaactctc ctgttctgat gtgagtgtct ctggaattgt tatctcattt 600
actgctggct taatctctat gaccacattg attgttatag tcatatctta tttctattcc 660
ctcatcacca tcctgaagat gcaatccact gagggtcacc aaaaaacctt ctccacctgc 720
geogeocace teactgoagt cattetetet tatggaacag coacattett ttatgtgatg 780
ccaaagtcca cctactctga ggaccagaac aaggtggtgt cagttctaca cagtagcaat 840
ccccgtgtgg aatcccctca tctacagccc ttggaatact gagactaaga atgccctgaa 900
atgacaattt tataggaaaa cattgtta
                                                                   928
<210> 982
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR256-38
<400> 982
atggtcaacc agageteece tgtggtette tteetgetgg gettetttga acacceacaa 60
```

```
ctggaaaagg ttctgtttgt ggttgtcttg tgctcctacc tcctcaccct cctaggaaac 120
acactcatcc tettgetgte caccetggat eccaggetee acactecaat gtacttette 180
ctctctaacc tctccttctt ggacctctgc ttcaccacaa cctgtgtccc ccagatgctg 240
ttcaacctct ggggccccga aaagaccatc agcttcctgg gatgctttgt ctagctcttc 300
atcttcatgt ccctgggtac aacagagtgc atcctcctga ctgtaatggc ctttgaccgc 360
tatgtggctg tgtgccagcc cctgcactat gccacagtca tcaacccccg cctatgtcag 420
cagttggcag gtatagcttg ggctataggt ttggtccaat ccatagttca gacacctccc 480
acceteaaac tgecattttg tteecacagg cagatagaca aetttgtgtg tgaagteeca 540
tetetaatte aactetettg tggagaeate acatataatg agateeagat ggetgttget 600
agtatettea ttgtggttgt geetetgagt eteateettg tetettatgg tgeeattgee 660
agggcagtgc tgaagataag ctctgcaaag gggcgcagga aagcttttgg gacctgttcc 720
teccaectea ttgtggteae tetettetae ageteagtea ttgcagttta tetgeageee 780
aaaaaccctt atgcccgaga gaggggcaag ttctttggtc tcttttatgc agtgggtacc 840
cccacactca accetettgt atataccetg aggaacaagg aggtaaaaag agcattetgg 900
aagctgctaa ggaaagatga ggactctgag gagagc
                                                                 936
<210> 983
<211> 826
<212> DNA
<213> Mus musculus
<220>
<223> MOR256-39P
<400> 983
ggaacacact tcatcctcct gctgtccacc ctggacccca ggctccactc tccaatgtac 60
ttcttcctct ctaacctctc cttcttggac ctctgcttca ccacaacctg tgttccccag 120
atgttgttca acctctgggg ccccacaaag accatcagct tcctgggatg ctctgtccag 180
ctcttcatct tcatgctcct ggggacaaca gagtgcatcc tgttgacagt aatggccttt 240
gaccgctatg tggctgtctg tcagcccctg cactatgcca ccataatcca cccccgccta 300
tgtcgccagt tggcaggtgt ggcctgggct ataggtttga tccaatccat agttcaaata 360
ccacccaccc tcacactgcc cttctgttcc cataggcaga tagatgactt tctgtgtgaa 420
gtcccatctc taatccgact ctcttgtggg gacaccactt ttaatgagat tcagttgtca 480
qttqcaqqtq tcatcttcct qcttqtacct ctqaqcctca tcattqtctc ttatqqtqtc 540
attgccaggg ctgtactaaa aactaactct tcaaaagggc gcagaaaagc ttttgggacc 600
tgttcatccc acctcattgt ggttaccctc ttttacagct cagtcattgc tgtctatctg 660
cagcccaaaa atccctatgc ccaagagagg agcaagttct ttggtctctt ttatgcagtg 720
ggcaccccc acactcaacc ctcttgtata taccctgagg aacaaggagg taaagagggc 780
attctggagg ctgctgggga aggatgcggc ttctggagga aactaa
                                                                 826
<210> 984
<211> 792
<212> DNA
<213> Mus musculus
<220>
<223> MOR121-2P
<400> 984
attagaagtc ttaagggtgt agaaaggcag tagaaaaaga aacccataaa gtagccaaaa 120
gtctggctac actggctggc tgcttgctcc agttcctcac cttcacctct ctagatgcag 180
atgagtattt cctqctqact ctcatqqcac atqatcactq cctaqcaatc ttttactccc 240
tataataccc acgtctcatg aggcctcaat ggtgcctggg gttggtgatt atagtctggc 300
tgtctggctt tatggaagct ggattagtgg ttgctttgac agcccagctg aggttctgtg 360
gccccaacct aattgatcac ttttactgtg atttctcacc tttgatgatc ctggcttgct 420
cagatacctg agtggcccag atgactacat ttgttctctt tgttgtcttc ttacctgttc 480
```

```
tetetggget gattetgatg teetatgete agtttgtggt gattgtgetg agaatteeet 540
ctggggccag aaggaccaag gccttcttca catgctcttc tcacctggct atgatgttca 600
cattetatgg atcactcatg gtgtggtaca etgcgccctc tgctgtcctt agtttgcaca 660
ctcctctcca aggtcattgc tctgctctac acagtgtttg cccccatttt caattctgtc 720
atctacacct tgaggaacct ggacatgcag aaagcactaa gaaggcttct ttactgcaaa 780
tcaactgaaa tg
                                                                 792
<210> 985
<211> 760
<212> DNA
<213> Mus musculus
<220>
<223> MOR121-3P
<400> 985
gacactecte tecceccet ceatettet ttetqteeta tetaqtqtta caqqqttqqa 60
aggcatgaga gtatagaaag gcagtagaaa aaggaaccca taaagtggcc aaaagtctgg 120
ttacattgcc tggctgcttg ctccagttct tcacctttag ctctctttat atagatgagt 180
atttcctgct ggctctcatg gcatatgatc actgcctagc aatctgttac tccctataat 240
acceaegtet catgaggeet caatggtgee tggggttggt geteaeagte tgggtgtetg 300
getttatgga agatggatta gttgttgete tgacagecca getgaggtte tgtggeecca 360
acctaattga tcacttttac tgtgatttct cacctttgat ggcttgcttc qatacctgag 420
tggcccagat gactacattt gttctctctg ttatcttctt gactgtccca tttggctggt 480
tetgatetee tatgeteaga ttgtggtgae agtgetgaga attetetetg gggeeagaag 540
gaccaaggcc ttetteatat geceetetea eetggetgtg gtgteeaeae tetatggaae 600
actuatgggc ttgtacactg tgccttttgt tgttcattct caqctcctca ccaaqgtcat 660
tgccctgctc tacacagtgt tcactcccgt cttcaaccct gtcatctaca ccttgaaaaa 720
ccaggaggtg cagcaggcac taagaaggct tctctactgt
<210> 986
<211> 919
<212> DNA
<213> Mus musculus
<220>
<223> MOR121-4P
<400> 986
atcattggtt ttccaatgca gggtggtcag ccctgaaact atatatata acacaaacaa 60
tgtgtgtgtg tataagcata tgtacatact tacacatata aatacatatg tgtgtacaag 180
tggttatcaa gttgaaagtc aagtagggac ctggaaggag gttggaaaat gtcagtagaa 240
aaaagaactc aaagtaggca aaagtctggc tatactggcc aactgcttcc tccagtcctt 300
catccttggc tctgtagata gaaatatttc ctactgattg tgatggtgta tgatcactac 360
ctcacaatct gtcaccacct atgataccca tttttgatgg ggcccctatg gggcctaggg 420
tttggactca cagactagct tcgtggtaga tgaattaatt gttgctctga tggctcagct 480
gaggttctgt gttcctaaac aaattgatca cttttactat gatttctcac ctttggtggt 540
cctggcttac acagatactg gactggtcca ggtgactact tttgttctct ttgttgtctt 600
cetgactgtt ceetttggge tggttetgat etcetgtget cagattgeag tgactgtgtt 660
gagagtteet tetaggacea gaaggaacaa ggeettetee acatgeteet etcacetgga 720
tgaggtatcc acattctatg gatcacttat ggtctggtac actgagccct ctgctgtcca 780
ttcccagatc ctctccaagg tcattgccct gctctacaca gtqqtcacaa ccatcttcqa 840
ccctggcatc tacaccttga ggaaccagga ggtgcagcag tcactaagaa ggcacctcta 900
ctgcaaacca actgaaatg
                                                                 919
```

```
<210> 987
<211> 881
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (204)...(333)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR171-32P
<400> 987
atggaggaca tggcagcagg aaaccactgc acagtgactg agttcttctt agctgggctc 60
tcagagaagt cagaactcca gctgccactc ttcctgctct tcacaggaat ctatctgatc 120
accatggcag ggaacctggg catgatcaca ctgattgggc tcagttctca tctgcacaca 180
cccatgtact atttcctcag cagnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnnnn 240
nnnnnnnn nnnnnnnnn nnnnnnnnn nnncttgctt tacaatgtaa ccatgtccta 360
tcagtattta cagttctctg atttcagggg tatatatttt tgctgtgatc tgttcatcct 420
ttaacactgg cttcatgctt aggactcagt tctgcaattt agatgtgatt aaccactatt 480
tctgtgatct tcttcccctc ttgaatcttg catcctctaa tacctacatc aatgaaatat 540
tgattctatt ttttgctaca ctgaattcat ttgtcccagt gctgaccatt attacttcct 600
acatcttcat tattqtcacc atcctctcca ttcactccag ggagggcaag ttcaaagctt 660
ttagtacttg tagtacccac atctctgctg ttgctatctt ctatggttca ggtqcattca 720
cgtatttaca gccctcatca ctgaattcta tgggccaagc aaaagtgtcc tctgtgtttt 780
atactactgt tgtacccatg ctgaacccct tgatctacag cctgaggaat aaggatgtca 840
gtattgcact gaaaaaata cttgaaagaa aaaaattcat g
<210> 988
<211> 534
<212> DNA
<213> Mus musculus
<220>
<223> MOR171-33P
<400> 988
atggaggaca tgacagcagg aaaccattgc acagtgactg tgttcttctt agctgggctc 60
tcagagcagt cagaactcca gctgcccctg ttcctcttct tcacaggaat atatctaatc 120
actgtgtctg ggaatctggg catgattata ctaattgggc tcagttccaa cctgcacaca 180
cccatgtact atttcctcag cagtttgtcc ttcattgact ttggtcagtc cacagttgtt 240
accectaaaa tgttggtgag ctttctgaca gagaagaact tcatcaccta ccctggatgc 300
atgactcage tetattttgt cateattttt ggeactgeag agagetaeae attagetgea 360
atggcatatg accactatgt tgccatctgt aacaccttgg tttacaatat agccatgtcc 420
teteagattt aetgttetet gattteaggg gtataeattt ttgetgtgtt etgtgeatea 480
gtaaacatgg gcttcatgtt taggatccag ttctgcaaat cagatgtaat caac
<210> 989
<211> 534
<212> DNA
<213> Mus musculus
<220>
<223> MOR171-34
```

```
<400> 989
tectateaag tetgtttgtt gatggtaget gtggtgtatg gtattggett aateagtgee 60
acageteaca cagtetteet getaagattg tttttetgta aggetgataa aataaaceae 120
tacttttgtg atcttttccc attacttgag ctgtcttgct ctagtacttt tatcaatgaa 180
atattagcac tgtccttcag tgcatttaat attattgtac cagccatgac catcattggc 240
tettacatet teateattat eageattttg cacattaaat eetetggggg eagagteaag 300
gcctttagaa cctgcagctc ccatatcttg gctgttgcta ttttctttgg ttctacaaca 360
ttcatgtatc tacaaccatc ttcagtcagc tccatggacc aagggaaagt gtcatctgtg 420
ttttatacca ttgttgtgcc tatgttgaat cccatgatct acagcctgag aaataaagat 480
gtcaaagttg ccctaaaaaa gttactacaa aagatgtttc ctcaaaacaa ggaa
<210> 990
<211> 552
<212> DNA
<213> Mus musculus
<220>
<223> MOR275-5
<400> 990
gtgtgcctcc tgctgatgtc tgtatgttgg atcctgggat ccttggatgg cttcatgctc 60
accoctatea ccatgacttt cccattetgt ggateteggg agatecatea ettettetgt 120
gaggtccctg ctgtgacaaa gctctcctgc tcagacacct ggctctatga gaccctcatg 180
tatgtgtgct gtgtgctcat gcttctcatc cctgtgacag tcatttcagg ctcctataca 240
tocatoctoc toactgttot caggatgaac toagcagagg goaggaagaa ggooottgoo 300
acctgetect eccacatgae tgtggteace etettetatg gegetgetgt etatacetae 360
attittccctg cctccctcca cacccctgag aaggacatgg tggtgtctgt gttttacacc 420
atactcaccc ctctgttgaa cccactgatc tatagtttta ggaataagaa tgtcacagag 480
gctatgaaga aactgttggg tgtgaaaccc ttctttcaag aatctttaaa ggaagtcatt 540
tataaagaat ag
                                                                 552
<210> 991
<211> 919
<212> DNA
<213> Mus musculus
<220>
<223> MOR285-4
<400> 991
atggagacag gaaaccgcag ctgtgggaca gacttcagct tggttggcct tttccagtat 60
ggacacatgg acacetteet etteacagte atetecatee tetttgeagt ggeteteata 120
ggcaacatca cactggtcct cctcatcagg ctggaccaaa gactccacac ccccatgtac 180
tttctcctca gccagctctc catcatcgac atgatgtaca tctccaccac tgtacccaag 240
atggcageta acttectete agacaceaag gecattteet ttetgggetg tgetgteeaa 300
geetttgtgt ttetgaecet gggtgggtet gaageeetee tgetgggett eatgteetat 360
gacaggtata tagccatctg ccaacccttg cactaccctg tgctcatgag taggaaagat 420
ctgctgctcc atggtcgccg gtgcctggag cagcagctcc atcaatgcat tcatacacac 480
agtgtatgtg tttcaacttc cattctgtgg atctaggatg gttaaccact ttttctgtga 540
ggttccatct ctcctgccac tggtgtgtga agacacgtcc cagtatgagt atacagtcct 600
cgtgagtgga cttgtcattc tgctgctccc cttcctggcc atcctagctt cctatgctcg 660
ctgctcctca cacctgactg tggccagtct gttctatgtt actggactct ccacatatac 780
ccagccacac teettgeatt eteetggaag ggacaaagtg gtggetgtge tetaeteaat 840
cgtcacccct gttctgaacc cattcatcta cagcctgagg aacaaggagg tcatgggggc 900
gctgaggaga caaatgggg
                                                                 919
```

```
<210> 992
<211> 777
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (212)...(249)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR275-6P
<400> 992
atggacetea ecacetggat gaacaactat aetggacagt eagattteae eetggtggga 60
ctcttcaqtc aatccaaaca ccctqccctq cttqctqtqq tcatatttqt qqttttcctq 120
atggccttqt ctqqqaacqc cctcctqatc ctqctqatac tctctqacac ccaccttcac 180
acaccaatgt atttttatc agccagctgt cnnnnnnnn nnnnnnnnn nnnnnnnnn 240
nnnnnnnng tttgtctcct gctgatgtct gtgtgttggg tcctgggatc ccttgggatg 300
getteatget cacceetgte accatgacet tecceattet gtgggteeeg ggagateeat 360
cacttettet gtgaggttee tgetgtgaea aageteteet geteagaeae etggetetat 420
gagaccetca tgtatgtgtg ctgtgtgete atgettetea tecetgtgae agteatttea 480
ggctcctata catccatcct cctcactgtt ctcaggatga actcagcaga gggcaggaag 540
aaggcccttg ccacctgctc ctcccacatg actgtggtta ccctcttcta tggcgctgct 600
gtctatacct acatgctccc tgcctctctc cacacccctg agaaggacat ggtggtgtct 660
gtgttttaca ccatactcac ccctcttttg aacccactaa tctatagtct taggaataag 720
aatgtcacag aagctatgaa gaaactgttg ggtgaaaacc cctctttcca gaaacag
<210> 993
<211> 923
<212> DNA
<213> Mus musculus
<220>
<223> MOR284-1P
<400> 993
tgggacctca gcagtcccat tctcctggga cttttcccag agctgtgcca tctgggcatc 60
cttgtcattt ctattctcct gatttatctc attgcattca cagggaatgc catcctggtc 120
ctcttgatct gggcagactc tcacctccgc accccaatgt acatactact cagtcagctc 180
tettetetet tategaettg geettaattt eegeeactge eeegaagatg gteateaact 240
ttttctccag aaagaaaagc atctccaaag ttgcctgtgg gacccagatt ttctgcttct 300
ttgcccttgg tggtcgtgag tgtctccttc tgaccctcat ggcttacaac cactatgtgg 360
ctgtctgtca tcccttgaga tattcaatta tcatgaacaa tagagtctgt ctgtggatgg 420
ccctcatgtc ctggggtgga ggtgccctga attctctcat caacaccttc tacatcatgc 480
actteceatt etgtggetet agggaaatee accaettett etgtgagetg tecaetgtee 540
tgaggetete ttgtgaggaa aacttetttg tatgagatgg tggtgtetgt caattgeate 600
gtgtttgttc ttctcctctt gggactcatc acgtcctcct atctgctcat cttcctcgat 660
gttctccgaa taaattctcc agagggcagg aggaaagccc tggccacgtt ttcctcccac 720
ctggccqttg tgagcctcta ctatgggcct gcatgatcat ttacatgacc cctaccactt 780
tocacactoc agaacagaat gaaatactog ctatgattaa caccatottt accoctatgo 840
tcaaccctct catctacagc ctgaggaaca aggaggtgca tgctgccctg agaaaagtaa 900
tgagtcaacg attcatttta aag
                                                                  923
<210> 994
<211> 357
<212> DNA
```

```
<213> Mus musculus
<220>
<223> MOR275-7P
<400> 994
atgagcaact acactacaca gtcagatctc accctagegg gactcttcag cegatccaaa 60
caccccgttc tgcttgctgt ggtcatattt gtggttttcc tgatggcctt gtctgggaac 120
gccctcctga tcctgctgat actctctgac acccacctcc acacacccat gtacttttt 180
atcagccage tgtccctcat ggacatgagg tacatttctg tcactgtgcc caagatgctc 240
atggaccagg teetggggag ceacaagate teacetgetg cetgtgggat geagatgtte 300
ctgtacctga cattagcagg gtcagaattt ttccctctqg ctgccatgtc ttatgaa
<210> 995
<211> 833
<212> DNA
<213> Mus musculus
<220>
<223> MOR204-29P
<400> 995
tacctggtga ctgtgtttgg aaatctcagc accatccttc tcattgggag tttcttccaa 60
actocatcat cocatgiact tittictcag coactiggot totgitigata tgggcctitic 120
atcttctgtc acacccaata tgcttgtcaa cttcctgact gaggaaaaac accatctcct 180
accttggatg tggcatacag ctcagctcag ctgctttctt tggggctgtt gagttcttcc 240
ttctggctgc catggcttat gatcgcttgg tagcaatctg caacccactg ctttattcca 300
ccaaaatgtc cacacaagtg tgtatccagt tggttgtagg tacttatgta gggggtttcc 360
ttaacgette atttgtaace catttetttt tttetttet ettetgtgge ecaaataggg 420
tcaatcactt tttctgtgat ttatctccta tgatggaact ctcctgttct gatgtgagta 480
teteagaaat tgttatetea ttttetgeag geteatteae aatgaceaea ttgtttgtta 540
tagtcatatc ttatttctat attgtcatca ccatcctgaa gatgcactcc actgagggtc 600
gccaaaaagc cttctccacc tgcatgtccc acctcactgc agtcactctc tactatggaa 660
ctaccatatt catttatgtg atgcccaagt ccatctactc cagggaccag aacaaagtgg 720
tgtctctgtt ctacgtggtg gtaatccccg tgttgaatcc tctcatctac agccttcgga 780
ataatgagat taaggatgct ctgaaaagac agttttatag gaaaacattg tta
<210> 996
<211> 624
<212> DNA
<213> Mus musculus
<220>
<223> MOR204-30P
<400> 996
atgatatect atggetttee tggacaatgg aaccacactg cagtgacaga gtteatttta 60
ttgggattaa cagatgaccc agtcctcaga gtcattctct tcagcatcat cctgtgcatc 120
tacctagtga ctgtgtctgg gaacctcagc acattccttc tcatcagagt ttcttcccag 180
ctccatcacc ctatgtactt ttttctcaqc cacttggctt ctgttgacat gggcctttca 240
tettetgtea cacceaatat gettgteaac tteetgactg agagacatag cateteetac 300
cttggatgtg gcatacagct cagctcagct gctttctttg gggcagttga attcttcctt 360
ctggctgtta tggcttatga tcgcttcata gcaatctgca acccactgct ttattccacc 420
aaattgtcca cacaagtgtg tatccagttg gttgtaggat cttatgtagg gggtttcctt 480
aatgetteat tigtaaceea titettitti tettittet tetgiqqaee aaataqagte 540
aattactttt totgtgattt toctootatg atggaactot cotgttotga tgtgagtgto 600
tctggaattg ttatctcatt tact
                                                                   624
```

```
<210> 997
<211> 532
<212> DNA
<213> Mus musculus
<220>
<223> MOR204-31P
<400> 997
atggctttca tatacaacgg tagccagaca acagtgacag agttcatatt attgggacta 60
acagatgacc cagtccttaa agtcattctc ttcagcatca tcctgtgcat ctacctggtg 120
actgtgtttg gaaatctcag caccatcctt ctcattggag tttcttccaa actccatcat 180
cccatgtact tttttctcag ccacttggct tctgttgata tgggcctttc atcttctgtc 240
acacccaata tgcttgtcaa cttcctgact qagaaaaaca ccatctccta ccttggatgt 300
ggcatacage teageteage tgetttettt ggggetgttg agttetteet tetggetgee 360
atggettatg ategettggt ageaatetge aacceaetge tttatteeae caaaatgtee 420
acacaagtgt gtatccagtt ggttgtaggt acttatgtag ggggtttcct taacgcttca 480
tttgtaaccc atttctttt tctttctatt ctgtggccca aatagggtca at
<210> 998
<211> 563
<212> DNA
<213> Mus musculus
<220>
<223> MOR246-1P
<400> 998
atggctcaca ataatgaatc cacggtatct gagtttgtgc ttctgggact ttctaaatct 60
tggggacttc agcttgtgct ttttaccatc ttctttgtca tctatgtgac atcagtcttg 120
ggcaatatca tgattattgt catcattttc tctgactcac acttgaactc tcctatgtac 180
tttttgctca gtaacctttc atttattgac atctgccaat ctaactttgc cacaccgaag 240
atgettgtgg aettttttgt egaatacaaa aetatttett ttgagggttg tatggeteaa 300
atatttette tteatagett tgttgggagt gaaatgatgt tgettgtage tatgggatat 360
gacaggtttg tagcaatatg taagccactg cactacaatc taattatgaa tcqqaqagta 420
tgtataattt ttgtgtcaat ttcttgggca gtaggtatcc ttcattctgt gagccatttg 480
gcatttacag tgaatctgcc attctgtggt cccaatgagg tagatagctt cttttgtgat 540
cttcccttgg gataaagctt gcg
<210> 999
<211> 459
<212> DNA
<213> Mus musculus
<220>
<223> MOR247-3P
<400> 999
gcattgacag tgaatttgcc tttctgtgga cacaatatta taaataatat attttqcqac 60
cttcccctgg taatcaagct tgcttgtatt gaaacataca ctctagagtt gtttgtgatt 120
getgacagtg ggetgetete etttatetet ttetteetet tgettgttte etataetgte 180
attetgetea ttataaagea caaateacet ggeagtetet ceaaggeget gteeacattg 240
tetgeteaca taattgtggt cactetgtte tttggaceet gtatttttat etatgeetgg 300
ccatttggga gttttgcaag caatacaact cttgctgtat tttacactgt tatcacacct 360
ttactgaatc ctattattta cacactgaga aatcaggaaa tgaagaaagc catgagaaaa 420
```

ttattattta gattaacctt ctgtaaatcc aatataatag atcattttta ctgtgagatc 540 ctgccactct atacaatttc ttgcaccgca cccatctatt aatgcatttn nnnnnnnnn 600

```
nnnnnnnn nnnnnnnnn nnnnnnnnn ttatgtacgt gagccctggg tctggaccaa 840
gtaaatataa gaataagatg tattetetgt tttacaccat tgtgatteet ctactaaacc 900
ccttcatttt acagcttaag aaacaaggaa gttttagggg ctctgagaaa aatcataaag 960
tca
                                                               963
<210> 1002
<211> 919
<212> DNA
<213> Mus musculus
<220>
<223> MOR182-8
<400> 1002
atgacagtag aaaaccagac tgtggtggca gtgtttgttc tcacaggact cactgagaga 60
cccgagttqc aggttcccct cttcctggtt ttcttcacca tctacctcat caccatggtg 120
ggcaaccttg ggctcattgc tctcatctgg aaggaccctc acctccacac tcccatgtac 180
ttatttctgg gaagcttagc ttttgcagac qcctgtqctt catcttctgt gactcccaag 240
atgcttgtca atttttatc taaggatcac agaacattct tggttgagtg cttcacccag 300
ttttatttct ttggttccag tgcaacgaca gaaatgtttc ctactgtcag tgatggccta 360
tgaccgctat gtggccatat gcaacccttt gctttatcca gtgatgatgt ccaatagcct 420
ctgtatgaaa tttatacatg tttcatatat tgtaggtttt ctacattcag caattcatgt 480
gggcttgtta gtgagattaa atttctgcaa qtccaacatc atacactatt tctactgtga 540
aatcttgcag ttattcaaaa tttcctgcac tgatcctaca atgaacgtcc ttctggtttt 600
aatattttca gctttgatac aaggettgac ttttatgact attatcgtct cctacttctc 660
tgtccttctt gccatcctga aaacaaagtc tgagagggc agacgcaaag ccttctccac 720
ctgcagtgct cacctgctct ccgtgtctct gttctatggc acacttttcc tcatgtatgt 780
gcgtcccggg tctggatcag gtgaagataa ggacagaatg tattctttat tttacacaat 840
aataattccc tttctaaatc cttttatata cagtctgagg aacaaagagg taacagctgc 900
tctgcgaaga aaaatgaaa
<210> 1003
<211> 709
<212> DNA
<213> Mus musculus
<220>
<223> MOR183-5P
<400> 1003
tcatccacag tgacaccaaa gatgctacaa gacatttttt ccaagagtaa actgatctct 60
ttototgaat goatgataca gtttttttto atttgtagtg agtacaacca cggaatgttt 120
tcttttggca gcaatggcct atgatcgcta tgtagccata tgcaaacctt tactctaccc 180
agtgatcatg acaaatagac tttgtgtacg tcttttaaca ttgtcctttt taggtggatt 240
cattcatgct ttaattcacg aaggettttt attcagatta attttctgta ggtctcacat 300
aataaaccac ttttattgtg atgttatgcc actgttaaag atttcctgta atgacccttc 360
tatcaattac ctgatgctct ttattttctc tggctcaatt caggtcttca caattacaac 420
tatccttgtc tcttatacac ttgttctgtt ttctatccta aagaagaaat ctctcaaaag 480
cataaagaaa gccttttcca cctgtggagc ccatctcctc tctgtttctt tgtactatqg 540
ccctctgctc ttcatgtatg tgcgccctgc atctccacaa gtaaatgatg aagatatgat 600
ggactetgta ttttacacca teataattee tgtactgaae ecaattatet acagtetgag 660
gaatgagcaa gtaaaaaaat cactggcaaa atgtttaagg agaaatagt
                                                              709
<210> 1004
```

<211> 918

```
<212> DNA
<213> Mus musculus
<220>
<223> MOR183-6P
<400> 1004
gaaataaaaa attctactgt gctgacagag tttgtgctta cagggctcac agggtctcca 60
gagctacagg tgcccttatt cttgtttttt tttggtgatc tatcttatca caattgtagg 120
gaaccttggt ctaattgctc ttatctggaa tgaccctcac ttatatatcc ctatgtactt 180
ctttcttggc catctggctt ttgtggatgc ttgcctatca tccacagtgg caccaaagat 240
gttactcgac ttcttacaga tgaataaaat gatttcctac tctgaatgca tgacacaatt 300
ctttatcttt qcaatctqtq ttactacaqa atqtttcttq ttqtcaqctc tqqcatatqa 360
tcgctatgta gccatatgca aacctttact ttatccaatg attatgacta atagactatg 420
tatatgtctc ttagtcctgt ctttcgtagg tggaattctt caatacacga gggatttcta 480
ttactactaa cgttctgcaa ttccaatata gtacatcaat ttttctgtga caccgttcca 540
ttgctaaaga tttcctgtac tgacactact cttaattttc aactgttatt tgtttttgct 600
ggaataattc aagtcctcac cgttttgatt gtttttgtgt cctatacact agtcctgttt 660
atgattttgc aaaggaagtc tgtccaaggc atgaagaagg ctttctctac ctgtggtgcc 720
catctcttat ctgtgtctct gtactatggg cctcttctca tcatgtacgt gttccccgtg 780
tcccaagaag cagatggtca agatatcata gactetetgt tetacaegat cataatteet 840
gtgttaaatc caattatcta cagtctgaga aacaagcaag tcatagattc tctgaaaaaa 900
gtgttaaaga aaaaggtt
                                                                   918
<210> 1005
<211> 483
<212> DNA
<213> Mus musculus
<220>
<223> MOR113-6P
<400> 1005
tttttaggtg gatttattca tgctttaatt catgaaagct ttttattcag attaattttc 60
tgtagctctc acataataca ccacttttat tgtgatgtta taccactgtt aaagatttcc 120
tgtaatgacc cttctatcaa ttacctgatg ctctttattt tctctggctc aattcaggtc 180
ttcacaatta caactateet tgtetettat acaettgtte tgttttetat eetaaagaag 240
aaatctctca aaagcataaa gaaagccttt tccacctgtg gagcccatct cctctctgtt 300
tetttgtact atggeeetet getetteatg tatgtgegee etgeatetee acaagtaaat 360
gatgaagata tgatggactc tgtattttac accatcataa ttcctgtact gaatccaatt 420
atctacagtt tgaggaataa gcaagtaaaa aaatcactgg caaaattttt acggagaaat 480
act
                                                                   483
<210> 1006
<211> 425
<212> DNA
<213> Mus musculus
<220>
<223> MOR184-10P
<400> 1006
ttctgcaggt ctcatgtgat caagcacttc ttttgtgatg tcctccccc tatacagact 60
ctcatqtqtt qacccttatt atcaatqaac tqatqatact catcqttqct qqttcaqttc 120
aaactttttc cattattata qtcctqattt cttatttctq catcctttat actatattca 180
caatqaaqtc caqaqaqqqa aqaaqcaaaq ccttatctac ttqtqcatcc cactttctqt 240
ctgtgtcaat attctatggg tctcttctct acacatatat tcgaccaagt tctatcaaag 300
```

```
gaggagatga agccatacct gttgctatat tttatactct ggtaattcct ttattaaacc 360
cctttattta tagtctgaga aataaagaag taattaatgt gattaaaaaa accataaaca 420
aagga
<210> 1007
<211> 400
<212> DNA
<213> Mus musculus
<220>
<223> MOR113-7P
<400> 1007
ttttattqtq atqttatqcc actqttaaaq tatttcctqt aatqaccctt ctatcaatta 60
cctgatgctc tttattttct ctggctcaat tcaggtattc acaattacaa ctatccttgt 120
ctcttataca cttgttctgt tttctatcct aaagcagaaa tctctcaaaa gcataaagaa 180
agocttttcc acctgtggag cccatctcct ctctgtttct ttgtactatg gccctctgct 240
cttcatgtat gtgcgcctg catctccaca agtaaatgat gaagatatga tggactctgt 300
attttacacc atcataattc ctgtactgaa cccaattatc tatagtttga ggaataagca 360
agtaaaaaaa tcactggcaa aatttttaag gagaaatact
                                                                   400
<210> 1008
<211> 925
<212> DNA
<213> Mus musculus
<220>
<223> MOR170-10P
<400> 1008
atggaaaatg actcttttgt gtctgaattt atccttatgg gactgacaga tcatcctgaa 60
ctccagttqt ccctqtttqt tctctttttq atqaactaca caqccattqt qatqqqaaac 120
ttgagcttaa tgattctcat tttcttgaat tcaaaccttc acacccccat gtactttttc 180
atcttcaatt tgtccttcat tgatttttgt tattcattcg tctttacccc caagatgcta 240
atgagetttt tttttagaga aaaacaccat ctacttcaga qqatqcatqa ctcaqetqtt 300
cttcttctqc ttttttqtqa actctqaqaq ttatqtqctq acaqccatqq cctacqattq 360
ctatgtggcc atctgtaagc ctttactata caagactatc atggtaccta ggatctgttg 420
tettetgatg titgtttaat atttgatagg gittactagt gecatgatee teacaggett 480
aatgtttagg ctcaactttt gtaataacca catcatcaat cactacatgt gtgacatctt 540
ccctqtcatt caqatctcct qcaqtqacac ctatctcaat qaqcttqtta qtactqctqt 600
ggtaggtaca ggtatcattt tatgtagcct ccttatctta atgtcttatg ctctgatcct 660
tttcaatatc cttaatatgt cctcaggtaa gggttggtct aaagccatgg gcacttgtgg 720
ctcccacatc ataaccgtta gtctctttta tggatctggg ctccttgctt atgtcaagcc 780
atcatctgct gagactgtgg gccagggaaa atttttctca ctgttttata catttctcgt 840
gcccgtgctg aatcctttca tatacagtcc ccagaacaaa gatgtcaaag ttgctgtgaa 900
gaaaaccttg aagagaatct caaat
                                                                   925
<210> 1009
<211> 937
<212> DNA
<213> Mus musculus
<220>
<223> MOR166-1
<400> 1009
atggttctag acaatggttc ttacatgact gaattcattt tactggtatt aaatgatcct 60
```

```
gatctccagt tacccctgtt cctactcttt ctgctaatat acacaacaac aacattgggg 120
aatttggctt tgatcacttt aattgcattg aattctctcc ttcacagccc cacatactgt 180
teceetttaa aettgtettt aattgaeete tgttatteat etgtaattae aeceaaaatg 240
ctgatgaact tettagtaag gaagaacatt ateteetaca tggaatgttt acetagetet 300
cttttgtttg tttgtttgtt tttctgcaat ttgtgaatgt tgtgttctga tatcaatggc 360
ctatgataat tatatggccg tatgcaatcc agtcttgtat aacattacta tatctcccaa 420
ggtgtgttcc tatcttatgc ttggttcaca cattatgaga ttttctggtg ccatqattca 480
cactggaagt attetgagae tgeeettetg tgacaggagt atcatcaaac actatttetg 540
tgaacttttc cctttgctgc aactttcctg taccagcatt tatgccaacg aaatagagat 600
totaatoata gatagtaaag atatoattgt gtocagtgtt atoatottta cotottatgg 660
tttcattctc tcaaatatcc ttcaaatgag atccactgca ggaatgtcca aagcctttag 720
cacctgcatc teccatatae ttaettttte tttattettt ggeteatgtg cattaatgta 780
tetteatece teeteacetq qqtetatqqa teaqqqaaaa qtetettetq tettttatat 840
tattgtggtt cccatgatga accccttaat ctttagcttt agaaacaagg atattaaaat 900
tgcactgaga aaagtcttga gcaaaaagag gttttta
                                                                   937
<210> 1010
<211> 934
<212> DNA
<213> Mus musculus
<220>
<223> MOR162-8
<400> 1010
atggcctctg gcaatgactc caccacagtg aaggagttta ttctgttggg cttgacacag 60
caaccagage tecagetgee tttettette etgttettgg gaatetatgt ggteteeatt 120
gtggggaacc tgggcttgat tgttctgatt gttttgaatc ctcacctgca cacccccatg 180
tactactttc tcttcaacct ttccttcatt gatttctgct actcctctgt cataaccccc 240
aaaatgctgg tgggttttgt gaaacagaat atcatttctc atgctgagtg catgactcaa 300
ctctttttct ttgccttctt tgttattgat gaatgttgta ttttgacagc aatgtcctat 360
gacagtatat gtggccatat gtaagccatt gctttataag gttaccatgt cctatcaggt 420
ctgcttcatg atgacagtga gtgtgtacat gatggggttt gtgggtgcca tagcccacac 480
aatttgcatg ctgagactca ccttctgtga tggcaacatc attaatcact acatgtgtga 540
cataccccct ctcctgaagc tctcctgcac aaacacctct gtcaatgagc tggtggtttt 600
cattgttgtg ggtgtcaatg tgataggacc tacattgatc atctttactt cttatacttt 660
gatcattttc aacatttcac atatccgttc cactgaaggc agatccaagg ctattagtac 720
ctgtagctcg cacataatag ctgtttctat tttctttgga gcctcagcat tcatgtatct 780
taagcettet cetgttggat etgtgggtga agataaagta tetaeggttt tetaeaceat 840
tgtgggcccg atgttgaacc ctttcatcta cagtttgagg aacaaggatg tccacattgc 900
actgcataag actttgaaga aaagcatgct tatc
                                                                   934
<210> 1011
<211> 705
<212> DNA
<213> Mus musculus
<220>
<223> MOR256-41P
<400> 1011
atggatagtt tcaatgccac gttagaagag agattctttt tggtgggctt tttagattgg 60
cctcagctgg aactcatcct ttttgttttt atttcaattt tctactccct aactatcttt 120
ggcaacaceg ccatcatege teteteceaa atggacette gaetgeacae ecceatgtae 180
tacttcctct cccacctctc cttcctggac ctctgctaca ccaccagcac tgtgccacag 240
cttctcataa atcttcatgg acttgacagg accatcagct atggagggtg tgtggcccag 300
cttttcatat ctcttgcact gggatccact gagtgtgtgc tcttagtggt gatggctttt 360
```

```
gaccqctatq ctqctqtqt tcqtccactq cactacatqa ccatcatqca ccccttctc 420
tgtcaggcat tggctcttgc ttcatgggta ggaggattct tgaactctct gattcaaaca 480
ggcctcatga tggccatgcc actctgtgga catcgactga atcacttctt ctgtgagatg 540
cctqtcttcc tcaaqttqqc ctqccaqqac acaqqaqqaa caqaqqccaa qatqtttqtq 600
gccagagcca taatcttggt cttccctgca acattaattc ttggctccta tggacacatt 660
gctaaagcag tactaaaggt caagtcaaca gctggacgca gaaaa
                                                                  705
<210> 1012
<211> 934
<212> DNA
<213> Mus musculus
<220>
<223> MOR233-15
<400> 1012
atgcaaaacc agagcattgt cactgagttc atactgctgg gactttcaca gaacccaaaa 60
qtqqaqaaaa tactatctqt tttqtttttc ttqqtctacc ttqcaactat tqqaqqaaac 120
atcataattg tggtaacaat tgtattcagt cctgcacttt ctggctcccc catgtacttc 180
tttctatctt ttctatcctt cctggatgca tgtgtttctt ccgtaatcac acccaagatg 240
attgtagact tcttctatga gaggaagacc atttcctttg aatgttgtat gatacaactc 300
tttgctgtcc acttcttcac aggggtggaa gtgattgtcc tgtcagccat ggcctatgac 360
cgctatgtag ctatttgcaa gcccttgcac tactcttcca tcatgaccca gaggctctgt 420
ggcatcctag tcggaatagc ttgggcagga ggcttcttgc attctatcat ccaaattatc 480
ttcactttgc agttgccctt ctgtggcccc aatgttattg atcattttgt atgtgacttg 540
ttcccattac taaagcttgc ctgcaccaat acacacattt ttgtcatttt ggtatttgcc 600
aatagtggtt ctatctgcat cattatcttc tctattttgc ttgtttccta tggtgtcatc 660
ttgttctctc tgagaaacca cagttctgaa ggtcggcgta aagctctctc tacctgtgga 720
teceacatta etgggtgtge ttttgttett tgteeettge atattaatat atgeacgaaa 780
taattotgaa ttotoatttg agaaaaatgt gtttatattt gatgatgtoo tgacaccaat 840
gctaaatcct ttggcttaca ctttcaggaa taaggaaatg aagaatgcca tcaagaaaat 900
gtggaggaga ttgtttaata tttctgataa gcat
                                                                  934
<210> 1013
<211> 789
<212> DNA
<213> Mus musculus
<220>
<223> MOR233-16P
<400> 1013
atgaattcaa tttacttcat attcttcttg aaattatgca aaaccagagt tttgtaacag 60
aattcatatt ccttggactt tcacagaacc ctaaagtcca gaaaatagtt tttattgtat 120
ttttatttgt ctacattgca actgttgggg gcaacatgat aattgtggtg accattgtct 180
gtagcccage attgatagac tgccccatgt acttcttttt ggcattcttg tccctattgg 240
atgcatgctt ctcttctgtc atcacaccaa agatggttgt tgactccctg tatgagaaga 300
aaactatctc ctttgaagga tgtatgatgc agttatttgc tgagcacttc cttgcagcag 360
tagaagtgat tgtcttgaca gccatggcct atgaccgcta tgtagcaatt tgcaagccct 420
tgcactactc ttccatcatg aactggaggc tctgtggcac acttatgggg atagcatgga 480
cagggggctt cttgcattct atcatacaaa ttatcttcac gttgcaattg cccttctgtg 540
gaccaaatgt catcgatcat ttcatgtgtg acttgttccc attactggaa cttgcctgca 600
ctgatactca tatctttggc cttttagtgg ttgccaacag tgggtctatc tgcatcataa 660
tettetetat titigetggte teetatggtg teateetgtt etetetgaaa gateaeagtt 720
ctgaagggcg atggaaagct ctctccacat gtggatccca cattgcagtt gtggttttgt 780
tcctttgtc
                                                                  789
```

```
<210> 1014
<211> 1036
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (370)...(902)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR225-10P
<400> 1014
atgtggattc acctagaatt catggaaaat cataaaaatg tcacagagtt catttttatg 60
ggtctttggg agaatagaca aatagagctg ctgttctttc tcttgttcct gctttgctac 120
ctggctgtct taatgggaaa ctccgtcatc cttctcacca tcacctgcag ccacctaatc 180
qaacaaccaa tqtattattt tctctqccat ctttccctca tqqacctctq ctacacctcc 240
actgtgattc ccaggetcat cagggacttg gcagcaacaa gaaaaaacat ttcctataat 300
gagtgcatga cccagctctt cactgcccac ttgctggcag gtgtggaaat cttcatcctg 360
nntgttttac actgtgattg ccccaatgtt gaatcccctt atctatactc tgagaaacag 960
tgagatgaaa agtgccatgc acaaggtgtg gtctcggctg tcactcagag ttgaagtaag 1020
tgaaagaata ttgtga
                                              1036
<210> 1015
<211> 471
<212> DNA
<213> Mus musculus
<220>
<223> MOR233-17
<400> 1015
totatoatac aaattatott cactttacag ctaccotttt gtggacccaa tgtcattgat 60
cattttatgt gtgacttgtt cccattactg gagttggcat gcactaacac ttatgtctat 120
ggtctcttag tgtttgccaa cagtgggtct atctgcatca taatcttttc tatqttqcta 180
atctcctatg gtgtcatctt attctctcta agaagtcaca gttctgaagg gcgatggaaa 240
gctctctcta cttgtggatc ccacattgct gttgtggttt cattctttgt cccatgcata 300
ttcatatatg cacgatctac atctgcatca tcttttgaga aaaaggtggc tgtgttcgat 360
ggcatcatga ctccattgct caatcctcta atttacactt tcaqaaataa aqaaatqaaa 420
aatgccatta ggaaaatgtg gaacagattt agaatggtct ctgacaaatt t
<210> 1016
<211> 933
<212> DNA
<213> Mus musculus
```

```
<221> variation
<222> (460)...(678)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR231-15P
<400> 1016
atgggccaga gcaacaatgt cacagaattt gtcctgctgg gcttcactca ggatcctgct 60
gggcaaaaag ctttatttgt tatgttttca ctgatgtaca ttgcaacaat ggtgggcaac 120
ctgctcatcg taggaacagt gattgccage ccctccttgg getccccaat gtacttcttc 180
cttgcctctc tgtcactcat ggatgctgtt tattccactg ccatctcacc caagttgatt 240
gtagacttqc tccqtqaqaa aaaqaccatc tccttcaqag cttqtataag ccaqctcttt 300
atagagcatt tgtttggtgg ggttgacatt gtcattctag ttgcaatggc ctatgatcgc 360
tatgtggcca tctgtaagcc actgcattat ttgatcatca tgaatcgaag ggtatgtatc 420
ctcttacttg gtgatggcct gggcgggagg ttttgcacan nnnnnnnnn nnnnnnnn 480
nnnnnnnnn nnnnnnnct gtccacctgt ggttcccata tcactgtggt ttttctcttt 720
tttgttccat gtattttcat gtatgttaga cctgtttcta gttttcctat tgataaatcc 780
atcactgtaa tttataccat tgtcactccc atgttgaatc ctttaatata taccttgaga 840
aattcagaaa tgaaaatttc catggaaaag ctcctgcaga aaacattaag tccatgtaga 900
atacgtcttt cttcttgctg cttatgttac taa
                                                            933
<210> 1017
<211> 358
<212> DNA
<213> Mus musculus
<220>
<223> MOR231-16P
<400> 1017
atgggccaga gcaacaatgt cacagaattt gtcctgctgg gcttcactca ggatcctgct 60
gggcaaaaag ctttatctqt tatqttttca ctqatctaca ttqtqacaat qqtqqqcaac 120
ctgctcatcg tagggacagt gattgccagc ccctccttgg gctccccaat gtacttcttc 180
cttgcctctc tgtcactcat ggatgctatt tactccactg ccatcacacc caagttgata 240
gtagacttqc tctqtqaqaa aaaqaccatc tccttcaqaq cttqtataaq ccaqctcttt 300
atagatcatt tgttttggtg gggttgacat tgtcattctg ctggcaatgg ccttatga
<210> 1018
<211> 937
<212> DNA
<213> Mus musculus
<220>
<223> MOR245-15
<400> 1018
atggaaagag tgaatcagtc tgtggtgtca gagtttgtgt tcctgggact caccaactcc 60
tggagtattc aactatttct ctttgtgttc tcctccacgt tttatgtggc aagcatgatg 120
ggaaacagcc ttatcgtgtt cactgtggca tctgaccctc acttacactc tcccatgtac 180
tttcttttgg ctaacctctc tttcattgac ttgggtgttt cttctgttac ttctccaaag 240
atgatttatg acttattcag aaagcacaaa gtcatctcct ttacaggttg tgttactcaa 300
atatttttca ttcatgtcat tggtggtgtg gagatggtgc tgctcatagc catggccttt 360
gacagatatg tggccatatg taagcctctc cattacctga ccattatgag cccgaggatg 420
```

```
tgcatcttgt tttcagtgac tgcctqqqtq qttqqcctta tgcattcttt gattcaactq 480
gcttttgtag taaacttacc attctgtgga ccaaatgtgt tggacagctt ctactgtgac 540
cttcctcggt ttatcaaact agcctqcata aatacttacc agctggagtt aatggtcaca 600
gccaacagtg ggttcatttc tgtgggctcc ttcttcatac tgatcatttc atatattgtc 660
atcataatca ctgtgcaaaa acattcttca agtggttcct ctaaagccct atctactctt 720
tetgeteaca tetetgtggt gttettatte etttggteet ttgatatttt tetatacetg 780
gccatctcct tcaacacatc ttgataagtt tctggccata tttgatgcag ttatcactcc 840
gtttctgaat cctataatct atacatttag aaatcaagaa atgaaggtag caatgaagag 900
agtatgcaga cagctagtta gctataggaa agcttcc
                                                               937
<210> 1019
<211> 964
<212> DNA
<213> Mus musculus
<220>
<223> MOR245-16
<400> 1019
atggatggag gaaatcactc aatggtatca gaatttttgt tgctaggcct caccaattca 60
tggagaattc agattctcct ttttctgttc ttcacagtat tttatgtggc aagcatgcta 120
gggaacctgc tcattgtgct cacaatcatc tcagaccacc acctgcactc ccccatgtac 180
ttcctgctgg caaacctctc cttcattgat acaggtgtgt ccagcatcgc tactccaaag 240
atgatttatg acctettcag aaagcacaaa gtcatetace ttgaacggat gcatcactca 300
gatgttette atteacactg ttgggggaac agagatggtg ttgeteatag teatggeeta 360
tgacaggtac attgctatct gtaagcccct ccactacctg accatcatga gtctcagaat 420
gtgcattgtt cttttggctc ttgcttggat cattggcctt atccattctg tggcccaatt 480
ggcttttgtt gtaaatttac ccttctgtgg agctaataaa atggacaget tttactgtga 540
ttttcctcgg ttcatcaaac tcgcatgtac agacacatac agactggagt tcctqgtcgc 600
tgccaacagt ggtttcatct ccatggccac cttcttcatc ctgattgtgt cttacatctt 660
cattetggte acagttegta aacacteete aggtgettee tecaaggeee tetecaetet 720
ctcagctcac atcactgtgg tcgttttctt ctttggtcct tgcattattg tctatgtgtg 780
gcctttcccg actttaccca tagataaatt tttagcaatt ttcgatgtca ttatcactcc 840
ttttatgaat cctctcatct atacacttag aaataatgag atgaaggttg cgatgaggag 900
actatttatt agggctttac atttcaaaaa tttttttatt agcagtttaa gagatttgag 960
ttaa
                                                               964
<210> 1020
<211> 883
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (173)...(318)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR245-17P
<400> 1020
atggatgggg agaaccacac agtggtgtct gagtttgtgt ttctgggact cacccactcc 60
tgggagattc agctcctcct cctcgtgctc tcctcaqtqc tctacatatt aagcatqqct 120
ggaaacatcc tcattgtgtt ctctgtgacc attgacctc acttacattc acnnnnnnnn 180
```

```
nnnnnnnnn nnnnnnncc atatgtaagc ccctgcacta ccctgaccat catgagtcca 360
cqtqtaatqt qttttqtttc tqqqtqctqc ttggggcctg ggcattaqcc actcattqtt 420
ccaqctggct tttcttattq acttaccctt ctgtggccca aatgtactgg acagctttta 480
ctgtgacctt cctagacttc tcagattggc ctgtaaagac acctacaagt tgcagttcat 540
ggtcactatc aacagtggtt tcatctgtgt tggctctttc ttgttgcttc ttatctctta 600
catcttcatc ttgtttagtg tctggaaaca ttcttcaggt ggttcatcca aagccctctc 660
cactetetea geteacatea eagtggtgtt tetetttttt ggteetaete tgtttatata 720
tacatggccc catcctaatt cccagataga caaatttctt gctctttttg atgcggttct 780
tactcctttt ctgaacccag ttatctacac attcagaaat aaagagatga aggtagcaat 840
aaagagagtt ttaaaagtat tattaacttt tagaaatatt tca
                                                                  883
<210> 1021
<211> 973
<212> DNA
<213> Mus musculus
<220>
<223> MOR119-3
<400> 1021
atggcagagg aaacaaggaa taggacatgg gtccgggagt ttgtccttga ggggttccct 60
gtggccgagc acctgagaat cctcttcttc ctgatgcatt tgctggccta cttggcttcc 120
atcatgggca acacgctcat aattagcatc acctgcgtgg accaccgatt gcagacaccc 180
atgtacttct tcctcagcac ttactccttt gtggagtgct gttttataac tacagttatc 240
ccccagctgc tcgccatctt tctgtcaggg aggcaaacca tctcctttqt ggcttgcttc 300
acacaggete ttgtggtttt tgteetgggg geaactgttt tttteeteet ggetgtetta 360
teccetggae egetatetgg ceatetgeaa acetetaeat tateeaacea teatgageee 420
aaggatgtgc tttctccttg ttactgtgtg cttagttttg ggattcctct tcatggctgg 480
tecagttgtg atgetttece agteatecta etgtggeece aatgttatte eteaettttt 540
ctgtgatttt gggccactgg caaatctctc ctgttcagat accatgtctg ttgagatgct 600
gttttttaac cttgctttaa ttgtgctttt tggttccctt ctggtagcca tctttgcata 660
cagcaacata gtggtcacaa tagtgggtct cccttcggcc agggagaaac agagagcttt 720
ttccacttgt teeteteate teattgteet etetetaatg tatggeaget gtgtatttat 780
atacatgaag ccaaagcaga caagcaggct ggacaccaac cgagaggctg ctcttgtgaa 840
catggtagtg acaccccttt tgaaccctgt catctacacc ctgagaaaca agcaggtcca 900
ccaggetetg agggatgeae tgtccagggt tcaattacce agatateaea ggageagtge 960
accttccctt tga
                                                                   973
<210> 1022
<211> 985
<212> DNA
<213> Mus musculus
<220>
<223> MOR119-4
<400> 1022
atggaacggc tgacggcaga ggaaacaagg aatgggacat gggtccagga gtttgtcctt 60
gaggggttcc ctgtggccga gcacctgagg atcctcttct tcctqatqca cttgctqqcc 120
tacttggctt ccctcatggg caacacgctc ataattagca tcacctgctt ggaccaccga 180
ttgcagacgc ccatgtactt cttcctcagc actttctcct ttgtggagtg ctgttttata 240
actacagtta tecceeaget getegeeate tttetgteag ggaggeaaac cateteettt 300
gtggcttgct tcacacaggc ctttttcttt cttttcctgg gagcaactgt tttttacctc 360
ctggctgtct tatccctgga tcgctatctg qccatctgca aacctctaca ttatccaacc 420
atcatgagec caaggatgtg ettteteect tgttactgtg tgettagett tgggatteet 480
etteatgget ggteeagttg tgatgettte ceagteatee tactgtggee ceaatgttat 540
tecteaettt ttetgtgatt ttgggeeaet ggeaaatete teatgtttag ataccaggte 600
```

```
ggttgagatg ctatttttta accttgcatt aattgtgctt tttggttccc ttctggtagc 660
catctttgca tacagcaaca tagtggtcac aatagtgggt ctcccttcgg ccagggagca 720
acagagaget ttttccactt gttcctctca tctcattgtc ctctctttaa tgtatggcag 780
ctgtgtattt atatacatga agccaaagca gacaagcagg ctggacacca accgagaggc 840
tgctcttgtg aacacggtag tgacacccct tctgaaccct gttatctaca ccctqaqaaa 900
caagcaggtc caccaggctc tgagggatgc actgtccagg gttaaattac ccagatttca 960
gaggagcaat gcaccttccc tttga
                                                                   985
<210> 1023
<211> 207
<212> DNA
<213> Mus musculus
<220>
<223> MOR263-8P
<400> 1023
tcacacctgg ctgttgtgtg cctcttctat ggcactatca tatccctgaa tttcaactcc 60
tcatcttctc actcaactgg gagggacatg gcagctgcca tgatgtacac agtggtgacc 120
cccatgctga accctttcat ctataccctg aggaagaggg acatgaaaag gggtttaagc 180
aaagtgctta ccatgaatat tcatcta
                                                                   207
<210> 1024
<211> 933
<212> DNA
<213> Mus musculus
<220>
<223> MOR257-6
<400> 1024
atgggcaagg aaaatcagac atgggtgagt gaattettgt tgetggggtt gteaagtgac 60
tggtggactc aggtctcctt gtttgtactg ttcctggcca tgtacttgct gactgtcctg 120
ggcaacctac tcatcatcct cctcatcaca ctggacagca agctccatac gcccatgtac 180
ttcttcctca gcatcctgtc atttgtggac atctgctaca ccaacagcac tgtcccccag 240
atgctcgtgc actttctgtc agccaggaag tccatcccgt ttcacagttg tgtgatgcag 300
ctgtatatct ccctagcaat gggcagcaca gagttcttcc tgctaggtgc catggcctat 360
gaccgctacg tggcagtgtg ctaccctctg cactacatgg tcatcatgca tggagggctg 420
tgtctgggac tggcttctgc ctgtctgact gctggtctca caaattcact aatgcagaca 480
ctcatgatct tccacttacc cttctgtcgt aaggtcatca atcactttgc ctgtgagatg 540
ttggctgtgc tgaggctgag ttgtgtggac atctccctca acaaggtcat ggtagccatc 600
tcaggatttc tggtgatcat gctcccttgt attctggtgc tgttttccta tgctcacatt 660
gttgctgcca ttctacgcat tcgctcttcc caaggatgac gcaaagcctt tgggacttgt 720
geeteecate teacagtggt ttetatgtgt tttggaacag ceatetttae atacatgagg 780
cctgtgggca gatcctcagc aggacaggag aagatggttg ctctcttcta tgctgttgtg 840
actecaatge teaatecaet catetacage ttgaggaaca atgatgtgat tggggetttg 900
aaaagaactt tggagaaact taaggaaaaa aaa
                                                                   933
<210> 1025
<211> 864
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (349)...(400)
<223> Any nucleotide A, C, G or T
```

```
<220>
<223> MOR257-7P
<400> 1025
atgagagaaa acatgacctg ggtaagtgag tttatcctta tgggtttaac aagtgacaaa 60
aacatccaag ctggactctt tgtcctcttt ggggtcacct acctgctgac tctqctgggc 120
aatggactca tegteetaet gattgeacte gacceaegae teeacetgee catgtattte 180
ttcctctgtc acctgtcagt ggtggacatc tgctacacct ccagtggggt tccccagatg 240
ctggcacact tcctcatgga gaaaaagacc atctcttttg ccctgtgtgg gacccagctc 300
tttttgctct gactcttggg ggaactgagt ttctgttgct ggctgccann nnnnnnnnn 360
cttcctacct gtgggcacaa tgtgctcaac catgtggcct gtgagacact gacactggtc 480
agactggcct gtgtggacat caccctcaac caagtggtga tactagcttc tagtgtggtg 540
gtgctgatga taccetgete tetggtetet etgteetatg eccaeattgt ggetgetate 600
atgaagatcc attctaccca gggacgccgc aaagcctttg agacctgtgc ctcccacctg 660
actgtggtet ceatgtetta tgggatggee etetteacet acetgeagee egeeteeaca 720
geetetgetg ageaggacaa ggtggtagtg atettetatg etttggteac ecceatgatg 780
aatcctctca tctacagtct gaggaacaag gatgtgaagg ctgctttcag gcgagttctg 840
atgaagaaca ttgagtcaaa gaat
                                                                864
<210> 1026
<211> 892
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (314)...(333)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR257-8P
<400> 1026
atgggaaaag acaaccagac atggatacat qaatttatcc teettggeet gtecagtgac 60
tggaatactg aagtetetet ettegteetg ttettgetga tgtaettggt gaeagtattg 120
gggaacttcc tcatcattgt tctgatcaga ctggacagca gactccacac tcccatgtat 180
ttctttctca ccaacctgtc cctggtggga tgtgtcttat gccacaagca tcgtccccca 240
gctgctggct cattttcttg ccacacaca aacaatccca tttctgagct gtgcagccca 300
gttatttttc tctnnnnnnn nnnnnnnnn nnnatactcc gccataatgc atacaggact 360
atgcagtagg atggctattg tttcttgggt cggtggttcc atcaactcag tcatgcagac 420
tgctatcacc ttccaactgc ccatgtgcac gaacgtgtac atagaccata tatcctgcga 480
gctgcttgct gtggtgaggc tggcctgtgt ggacacctct gccaatgaag ttgctatcat 540
ggtatccagc atcattctcc tgatgactcc attctgcctg gtcctcctat cctacatcca 600
gatcatctcc accatcctca aaatccagtc caaagaggga agaaagaaag cctttcacac 660
etgtgcctcc cacctcactg tggttgccct gtgctatggc atggccattt tcacgtatat 720
acageceeac tecageceet etgteetaca ggaaaagttg atttetetat tetatgegat 780
tttgacaccc atgttgaacc ccatgattta cagtctaaga aataaggaag tgaagggggc 840
ttggcagaaa ttactgggac aattctctga gttcacatca aaactgaaaa cc
<210> 1027
<211> 435
<212> DNA
<213> Mus musculus
```

<220>

```
<400> 1027
atggtcatgt cagcgaggaa taacccagat ctgaccccag cttcctttgt tctgaatggg 60
atcccaggcc tggaacacat gcacatctgg atctccttcc ctttctgttc catgtatgca 120
gtggctatga tggggaactg tggactcctc tatctcatct tctttgagga ttccttacac 180
agacccatgt actacttttt agcaatgctt tctctaacag accttgtcat gtgctctagt 240
acaatcccca aagccctgtg catcttctgg tttcatctca aagaaattgg atttgacgac 300
tgtcttgtac agatgttctt catccatacc ttcatgggga tggagtctgg agtgctcatg 360
ctcatggctc tggaccacta tgtagccatt tgctaccctc tgcattactc caccattctc 420
accaatccta tcatt
<210> 1028
<211> 651
<212> DNA
<213> Mus musculus
<220>
<223> MOR0-8P
<400> 1028
ttgaaaaaaa atcacatcag agtcactaaa ccaattcttc tgggattcac aaacaactct 60
gaaatacaga tatcactttt tgtttttttt ctggccatct acttagttgc cttactggga 120
aactttcttg ctttcacaat aaacagggta gaccctactc ttcaaacaca caagtatttc 180
tatctgcaaa acctatcaca qcttgaaqtt tqtttcactc tqqtcatqat accaaaqatq 240
ctggtagacc tggtaaagtc atttctttt ggggctgtgg tataagggtt tgttctttct 300
tettteetee etecatttee teeteeteet eagetttgat gatggeteta eettteagtg 360
tatgtgtgtg catgtgtgtg tgtgttgatc tagtcactga tgcaagtgct tgcatcctct 420
tttcttcatc atgtttcact tttattatag tctcctatgt acacattgct ggaaccactc 480
tgaggatgtc atttgcaacg gacggccaga aggcattttt tatttgttta ttatacctta 540
ctgtgatata ctacttttat gtaacagcca acctgaccta ctgaaggacc agctccaact 600
agtettetga aateaagtte tttgtettat aetgtettta tgtetatgtt a
<210> 1029
<211> 648
<212> DNA
<213> Mus musculus
<220>
<223> MOR214-7P
<400> 1029
atcaaggcaa agattgagga agaaaataca actgagataa cccaattcat ctgtctgggg 60
ttttcagatt ccccagaaat cacagaacta ttatttgact tatccacacc tggaacatgt 120
ccttcattgt tttaataagg atggattcac acctccacac acctagtatt tccttcaaag 180
aaatctacta catcagctca gcaatagaat aatgctttcc aaattcttcc aagaaaagca 240
aactatcagc tttgtgggct acatggtata atattttatc tttttcacta gggtgctaag 300
tgaatctttc cttgtgacag ctatgcctat gacaagtatg ctatcatttg caaccccact 360
gctctatcac caatcatgtt acccacctg tgtgcttggg tgatgqtaqa atcttatgtg 420
actacaaact catcttcttt acctcagatt tgtaccttgt tgcagctcta cttctgtgga 480
cttaacatca acagacgttt cttctgtgac atgccccagc tgttaaatct gtcctacact 540
gacaaattct ttgtacagtt tctgcttgcc atatttacaa ggttgtttag aatagtgaat 600
gccttactca tctcaatagc atatgactat gtagccatat ctgtagtg
                                                                   648
<210> 1030
<211> 942
<212> DNA
```

```
<213> Mus musculus
<220>
<223> MOR171-35P
<400> 1030
atggaaggca tggcagcaag aaatcactgt gtagtgactg agttcttctt ggctgggctc 60
tocaataaac aagaactoca gotgooocta tttotootot toataogatt otatgtagto 120
actgtgacag ggaacctgag cataatcaca ttgattgggc tcaattccca cctgccaaca 180
cccatgtact acttectcag cagectgtee tteattgact tetgteagte caetgttgta 240
accectaaaa tgeeggtgaa etttatggte gaaaagaaca eateateteg taeettgggt 300
gcatgactca gctctactgc ttcctcattt ttggcattgc agaaggttac acattagctg 360
caatggcata tgaccccttt gttgccatct gtaacccctt gctttacaat gcaactatgt 420
ceteteagat ttacaettee ttgattttea gtgtgtatat ttttgetgtg ttetgtatea 480
gtaaatgtag gcttcatgtt taggattaaa ttctgcaaac tagatgtgat caatcattat 540
ttctgtgatc ttcttcctct cttqaagcgt gcatgctctg atacctatat caatgaaatg 600
ttgattcaat attttggtac aacqaacatc tgtatccaaa ttctgactat ttttacttcc 660
tacatettea tattgecage atcetttgta tteaeteeae agagageaga tetaaageet 720
teagtaettt geagtteeea eatettgget gttgetgttt tetttggate tttageatte 780
atgtaccttc agccatcatc agtcagtttc atggaccaag ggaaagtgtt ctctgtattt 840
tatacaattg ttgtacccat gctaaacccc ttgatctaca gcctgaggaa taaggatgcc 900
aatgttgcct tgaagaaaat atttgaaaga aaaagattca ta
                                                                  942
<210> 1031
<211> 830
<212> DNA
<213> Mus musculus
<220>
<223> MOR171-36P
<400> 1031
atggacactg ggaatcattc tgcagcagtt gtttgtcctg gtgggattaa cacagcagcc 60
tgageteetg etgeceetet teattetgtt eetgggeate tatgtggtga eageagtggg 120
gacatgggca tgatcttgct catcacagtc agcccactgc tgtacactcc tatgtactat 180
ttcctcagca gcttatcctg tgttgatcta tattattcca ctatcattac tcccaaaatg 240
ctggtgaact tccttgggaa aaaaattttg attatctatt ctaagtgcat ggcacagcct 300
tttctatttg tggtctttgt ggtggctgag ggttaccttc tgactgtaat ggcatatgat 360
ctctatgtag ccatctgcag accattgctg tataatgtga tcatgtcctc taaacactgc 420
ttactgttag tgctggtttc ctttatctta gacatttttt tttctgcctt gacacacaca 480
agtgctatga tgaatctgag cttctgtaaa tcccacatca taggtcattc cttctgtgat 540
gttctccctt ttgctagcct ttcctgttct aacacacgtt tcaataaact tcttttatta 600
ttggagggat caacacctta gtgaccactc tagccgttgc catctcctat gtcttcatct 660
tgtgcagcat cctgtacatc agttcattga agggcaggtc caaagcatta ggagactgca 720
geteteatgt catggetgtg ggaattttet ttgggtetat caectteata tattteaagt 780
cttctaagat attaatattt tattatttta ttaatatttt attttactaa
<210> 1032
<211> 549
<212> DNA
<213> Mus musculus
<220>
<223> MOR171-37
<400> 1032
cccctgcttt acagtagcat catgtctcaa cataagtgcc tttctcttgt tttagtagtt 60
```

```
tacattatag gtataatttg tgcatcagct catgtagggt gtatatttag agttgatttc 120
tgcagatttg atgtcattaa ccattgtttc tgtgatctta tttctatcct taagctctca 180
tgctctaata tttttgtgaa tgagctctta attctaattt ttagtctaat taataccatt 240
ttcccaaccc tgaccatcct catttcttat actttcatca ttatcagcat cctgcgcatt 300
aaatctactg agggaagatc taaagccttc agtacctgca gctccctcat ctcagctgtt 360
getgtetttt teggttetge tgeatttatg tatetgaaac cateatette aageteeata 420
aatgaaggaa aaatatgttc catattctac accatctttg tgcctatgct caacccccta 480
atctacagtc tgaggaacaa ggatgtcaat attgctgtga agaaaattat agaaagaaga 540
tcatttttc
                                                               549
<210> 1033
<211> 932
<212> DNA
<213> Mus musculus
<220>
<223> MOR135-23P
<400> 1033
tttataaaac aaagaaaaat cgaggttggc aactgttcaa ccactgagtt ccttctcttg 60
ggaattacca ataagcccaa gatcaaggtg attttattta acagttttct gtttatctca 120
ttattctttt tgaaaatctt ggaatgatca ttttgataag aatgaatacc aagcttcaca 180
cattgatgta cattteetta gecaactete tttetetgat atetettaet etaetgeatt 240
tggtcccaaa atgatgaata gccttcaatt acatgtattt gatgttctgt gtagttcttt 300
atctctaaca tttttacaga tgctgagtgt ataatgctag cagtgatgac tcttgacagg 360
tataatgcca tcagcaaccc cttgatgtat gcagcagata tgttcaagtg gtgtgctctc 420
ggctcctggc tgtggtttta tctgtttgga atggtagatg ctttgataca tacaatattg 480
acatttcatc tgtgtttctg tgggttcaaa gaaatcaacc atttcttctg tgatatccct 540
cctctcctat cactattttc ctcagatata gaggtcaatg aactagacat attcatccta 600
tgtgagttta ctaagatgag caccatttca tgagtcctgg tcttttactg ttacatcatc 660
tcattagtct tgaagatctg ctctgctgag ggcaggttca aagcagtctc cacctgtacc 720
toccatocaa caactgotgt tgcaatttto cagggaatga tgtocatoat gtatttocag 780
ccaagttctg cttattccct gcatcaagat aaaatgacct cattattcta cactcttgtg 840
atcttcatgc tcaacgcagt gatttatagc ctcaggaatg aagatgttaa agcaagtgta 900
aaatgtccct gaaaagtaga atttcagatt aa
                                                               932
<210> 1034
<211> 1046
<212> DNA
<213> Mus musculus
<220>
<223> MOR0-9P
<400> 1034
atggaaatgg aaaatgtaac actgctgaca gtttatctta atagaacatc aaccacagtg 60
gaaactccct tcttcctgtc attgtttgta atcaatctca tctccaatgc aggtatttca 120
gtctgatcaa cttctgggtg atactcactt tcacatcccc atgtacttat tcctcagcaa 180
ttcacccttt gtgaatagtt ggttgccttc tgaattattg atcaccttct ctctctct 240
etetgtetet ecetetgtet etgtetetgt etetetetet gtetetgtet etecetgtet 300
ctctctctct gtctctctct ctccctccct ccgtccaata tgctgttttc ctttcagtgt 480
gagtgtcaag tgcttcttca ctccaagggc tagaattgct atatagctat atgcaagcct 540
ttactttatc caataattat gaccaatagc caatgtttcc acctagagat ttttgtcacc 600
tgagggtggt tttcttcatg tcttaactta tgagatattt ttattcagaa taactttctg 660
taattocaat gtaatatato attittattg tgacgttatg cttttttttt tttttaaga 720
```

```
tttcctqttc tqattcttct attaqcttcc tqttqatqtt tqqtttaqct qatacaqqtt 780
ggagatccac catagtgagt gttctaggct tttacataat tctctttaca ctcttactaa 840
gtaagtgttt caaaggcata aaaaaatgcc ttctctacct gtggagcaca tgtcctctgt 900
gcgtctttgt attatgtctc tcttcatgta tgtacqcctt qcttctagat atqcagatqc 960
tgagattgac tccctatttt acactgtcat agtcactatg ttaaacataa ttatctacag 1020
tatttaaaaa qcaaataata qattca
                                                                  1046
<210> 1035
<211> 899
<212> DNA
<213> Mus musculus
<220>
<223> MOR203-6P
<400> 1035
atggaacaca qtaatgactc caaaqtgact qaatttattc tcctqqqatt cqctqqtcaa 60
aatgagtett ggeacateet etttgeggta tteetagtea tttatgtage eacettagtg 120
ggcaacattg gcatgatect geteateaag etteattett eactgeacae teccatgtae 180
tttttcctgc agcatttggc ttttgttgac ctctgttact cctatgccat cactcccagt 240
gacactgggg cactgcaaaa ttttatgagc acaagaccat ccttcccctt cacaggatgg 300
acaatgcaat tgtatatcta tggtatcttt ataaacagtg actgattcat cctagctgct 360
agggctgtag acagctatgt ggccatctgt aacccacttc actgtcctat tatcatgtcc 420
cagagatggc attetggtgc ctctgtaaat acaggtttta ctttctactg aaacttttgc 480
agatecaatg ccattaatea tttttttetg taatgtgeca eccataetea eacettettg 540
ctccagtact gacttcaata ttgtgctgtt gacagttttg tgggttttaa ctttatcttc 600
tctgtgtctg ttgtcatatt tcctacacac atattttggc tgccatccta agaatgtttt 660
ctgctgcagg aaggataaag gctttctcca catgtgtgac acacgtgacc acaatcacca 720
tactcttccg aacagtctgc tacatgtatg tacttcatgg gatcaacaga tctcaagagc 780
agaagaaggt gacttatgtg tectatttta ttattattee catgttaaae etectegtgt 840
gtagtgtaag aaaccaagat atgatagaag tottgaggca catagaaaac aaatgtttg 899
<210> 1036
<211> 581
<212> DNA
<213> Mus musculus
<220>
<223> MOR223-7P
<400> 1036
tatgacaggt acctggccat atgccaaccc cctggcgtta cccagtcctc atgtctgcta 60
agttgagtac cttgctcgtg gctggagctt gggtggctgg cttaatccac ggagcaatcc 120
aagccateet aacetteege ttgeeetact gtggteecaa teaggtagat taettettet 180
gtgacattcc tgcagtgttg aagctagcct gtgcagatac cacagtcaat gagttgttca 240
cetttgtgga cattggagtg gtggttgcca gttgcttctc tetgateett etttectaca 300
totatateat tegggeeate etgaggatee gtaeagetga tgggaggega agggeettet 360
caacatgtgg ggcccatgta accatggtta ccgtgtacta tgtgccctgt gccttcacct 420
acctgcgacc tgacagccat ggcatcctgg atggggcggc tgctctcttc cccacagcca 480
tcacaccttt cctcaatccc ctcatctaca ccctgaggaa ccaggaggtg aagttagcct 540
                                                                  581
tgaggagaat ggtaggaagc caaagcacta agagtggggg c
<210> 1037
<211> 941
<212> DNA
<213> Mus musculus
```

```
<220>
<223> MOR167-5P
<400> 1037
caaataccca tgttctttgg gtttctggca atgtacccgg tcactgcatt ggaaaatttg 120
tttttgataa ttctaactgt gctgaattct cacgttcaca ccactatgta cttttcctct 180
ttaacttgtc ctttgtagtc ctttgctatt cttcagtgtt cactccccaa atgctgatga 240
actttataat aaggaaaaat acaatttctt acatggaatg cataacctag ctcttctttc 300
tttctttctt tctttctttc tttctttctt tctttctttc tttctttctt tctttctttc 360
tttctttctt tcttgagtgt tgcgttttga cttcaatggc ctatgatctc tatctgtaac 420
ccactgttat ataatctttt catgtcccct aagtaatgtt tgaaccttat tcttggctca 480
ttctttattt cattttccga tgctgtagca cactctacat gcaggttgaa actgacattt 540
tgtgatgtga tattcctcct ttgcttcagc tctgctgtac aagcacatat gtcaatgagc 600
ttgtaatttt tttttttgg ttgggtgcat taatatcatt gttccttctt caactatact 660
tatttcctat gatttcatcc tctccagcat gttctgcatt aaatcatctg agggtaggtc 720
caaagccttt agcacctaca gctcccatgt catttctctt tctctgttct ttgattcaag 780
tgcatttgtg tatttcaaat cctcctcagc tgggtctttg ggtgaagaaa atatttcttc 840
tgtcttttat tccaatgtgg ttctcattgt gaatccctta ctctacagct tgaggaacaa 900
agattaccct caggaaaact ctgaccagga agaacttttg a
                                                                 941
<210> 1038
<211> 966
<212> DNA
<213> Mus musculus
<220>
<223> MOR0-10P
<400> 1038
tetgageeca aetggaeagt geegeaggag tttgttatee taggtttete ggggtggeec 60
cagggeetee gagtgetget gttetetete etettgeege tetaettgge caetetgget 120
gggaacctgc taattctggg cctggccctg gcagaaccca ccctgcacac acccatgtac 180
ttetteetgg geteactgte tgeagtagag gtggeetaea caetggtaet caeceeggg 240
atgetggetg getteeteet geeteetggt ggeeaggeag tageaceete eacetgtget 300
gcccagatgg gtctattcgt ggctctcggt ggctcagagt gcctgctgct ggcagccatg 360
geettggace getacetgge tatetgeege cetetetact acceetaget catgacetet 420
ggactetgtt gggecettet agettgetgt tgtttgggtg geteaateet ageettagge 480
cttaccatgg ctatattcca gctgcctttc tgccacggtg gccttgtcaa tcatgtcttc 540
tgtgatctcc ccgcggtgct cgtgctggcc tgtgggaatc gggagcttca ggaacacgtg 600
ttactggcgg cctgtatgct tctgctgqtg ctqcctctaa tccttatctt qctqtcctac 660
accagagttc tggtggtcat cetgggggtg ggggatageg egggeegeeg caaggeette 720
aacacagtgg catcccatct cacagtggct gtgctccact atggctgtgc cacagccatg 780
tacgccagac ccctgagcag ccgctccctg gaggaagata agctggtgtc gctcatctac 840
attaacctca caccqctqct qtacccaqcc atctacacqc tgcgcaaccg ggacatgcag 900
ggtgccctcc agcgtgtggt cagccagagg acgatgggga cggtccagca agctgatctt 960
gtctag
                                                                 966
<210> 1039
<211> 710
<212> DNA
<213> Mus musculus
<220>
<223> MOR239-8P
```

```
<400> 1039
atggagcaga acgtcagcta cagcagggtg aaagaatttg tttgtgaagg actgacggac 60
acagtoccaa gagotgagtt tggtottott ttotottott ggtgtacaca gcaactgggo 120
tgggcagcct cctcatcatg gtcacggcaa cctgagagtg cctcctccac acccccattt 180
tttctctctc tgtgatgaca tttgatcaat acatggccat ctccaagccc ctacaatatg 240
tgagcatcat gagtagtagg cggtgccaga gcccacattg tggcttcctg gtgggaaact 300
ttgtccactc cattgtgcag atctccctct tactcccact tcctttcttt ggacccaatg 360
ttgttgatgg tttctactgg tgatgtccca caggccctca agetcacttg taccagcacc 420
tttgctctga ggtcttaatg attgctacca atggtttgat cactaccatg tggtttgtct 480
ctgtacccaa atcactgtgg tcaccctgca ctttgtaacc tgcatttatg tcctttactg 600
ccctccccat ggacagaget gtctccatca cattcactgt catcattcct gtcctcaacc 660
caatgatctg taccctgatg tcttagtcag gttttctatc cctgcacaaa
                                                                 710
<210> 1040
<211> 449
<212> DNA
<213> Mus musculus
<220>
<223> MOR133-4P
<400> 1040
tatgaaaaga aatatactga gatgacccag ttcattctcc tgggattctc agatttccac 60
caaatcacag ctctgcaatt tattatattt ctgtacctag aacttgtgcc tcattgtttt 120
aataagaatg aattoccaco tocacacato catgtaagto ttoctagtga totgtoctta 180
ataggeetet actatataaa eteaatggae eecaagatat eacaceeate tacageteea 240
ggtccaaagg atccagggcc accttctggc ctccacaggc atgcacatgg tgcatatgca 300
tacatacagg caaaaattca tacacataaa ataagtaatt ttttaagtca tgtagaaagg 360
aaagtcactt cttggccatg actcaagaga caaaattatt catgctatta gtttacatcc 420
ctggagtgaa gttctattta tcaagcatc
<210> 1041
<211> 746
<212> DNA
<213> Mus musculus
<220>
<223> MOR177-13P
<400> 1041
ggacatagga aattttcctt gaatgaattc atttttgcag gatttgccaa taaccctgag 60
atgaaaggga taatttgtca tgtttctagt tatctatctg attaatcttc tgcagacggt 120
tggcatgatc attttaatga gaatggatcc ccagctccac acatccaagt acttttactt 180
gagccatctc tctttctctg atttctacta tttcattgca attgttctca aagtgtcagt 240
aggtatattt ggctagaaca aataaatttg cttaaggggc tgtgctctgt agttcttcac 300
ttcctgcacc tttgcagatt gagtatatag tactggcagc gatgtccttg ttagatacca 360
ggccatcage cactettget etacatacea cacaggeeca acagtgtggg taceteactg 420
ctgatattta cctggtgaga acattagatg ctttgaaaca ttttcccttg gctttccact 480
tatgtatete tgagteeaat gagateaace atttettetg taatttatgt gtaetttace 540
ttctctcctg ctcagataca cagtattcaa tatttatgat ttatttgtgc tgagcaccct 600
tgcaagtatc cttatctgtt actgttacac catttaatct gtcctggaaa tgcacttttc 660
tgagtggagg ttcaaatatt tatqtctgta ccttatqctt gattqcattt gccaattttc 720
aaataacttt aatcttcatc tattat
                                                                 746
<210> 1042
```

<211> 661

```
<212> DNA
<213> Mus musculus
<220>
<223> MOR264-15P
<400> 1042
aaaccaccaa tcaaaacctt cagaaagaaa tcaaatcaag ctaagagatg tgttctataa 60
ttttctgaat ttcccacttc cagtggtttc cattggactc ttatttatta catactcctt 120
tattctactg ggcaatgaca ccattgtact aatcacaagg gtagtttttt cctttggcaa 180
attttctttt ttagagatat ggtatatata tattactctt cctaggatgg tcttgggact 240
caaaaaagag ctatgtcttt cattgcctgt gctacaaaac tgtgcttcac tcctaccctg 300
ggagccacaa agggatttct cctggctgtg atgtacaatg acatttatgt ggctgtcggt 360
aaccetetge tetattetet acteetaaga etcacetgtg gateaagete teagetggat 420
cttggttcag tgggatgaat tctggtacag gtagattgca gacaacacaa agtttatatc 480
acttgctggt tcccaccaca ccaatcacat cttttgtgac ttccttgata tttcagcttg 540
cctgtgaaaa cgtttataaa cgagatggtg atcttcctag atgctgtttt gttttgctga 600
tcttcatttc ttttatttac ttataatata ttacaaaatt ctqacataat tattatctaa 660
                                                                   661
<210> 1043
<211> 303
<212> DNA
<213> Mus musculus
<220>
<223> MOR281-2P
<400> 1043
ccatcggccg agttgacgtc acggggaagg cagagcacat ggagtgaaga accacctcg 60
gcacatgcgc agattatttg tttaccactt agaacacagc tgtcagcgcc atcttgtaac 120
ggcgaatgtg ggcgcgctc ccaacataat acttctqtqq cccctttqct aaaccctttc 180
atttacaccc taaggaacaa acaggtgaaa gaagctttca aacatgtgct tcatagattt 240
tgttttctac aaaacaatga gacaatgttc agacatgctg ttgaaacatc aggagtaaaa 300
tag
                                                                   303
<210> 1044
<211> 826
<212> DNA
<213> Mus musculus
<220>
<223> MOR171-38P
<400> 1044
cccaccatgc tctagttctc ttacatatgt acatattctg ctggggaaga gaggttgttt 60
acaccactag aattaatagg ccatatggta agttgatcat ttttagtttt aagctctacc 120
aaaatgtcat taacttctaa tgatgatgag ctttgtgcaa gacaatgatg tcactccttc 180
cctgaactaa atgactctgc tctcttcctt cctaatattt gttacatatg ttaactggtg 240
gcatgcaacc agtggcatat gaccactacg ctgtcaccag caactgcttg gtaaataatg 300
teateagtet taacaagtet gtttetggat ggtaagtgag atgeatgeta tgggetteae 360
tgaagataca attcaaacac tctgcatcct gagagtgctt ttatgcaagg gtaaagtgat 420
gtgaaacaac tgcttctgtg atcttcttcc actgcttcca cttqcctact ccaqtacttt 480
tgtcaataag atagtgcttc tgtacaacag tgattcaata tgttccaacc caggccacta 540
tageceetta caegtteaac atcacetgea tectatgtat aaaateeace aatggeagag 600
tcaatgcgtt tagcagctac aattcccact tctttgcagt tgttgtcttt cttgttctct 660
ggetteatat atttteaace tteatttget eeaagaagaa aaataaagea teatetetgt 720
```

```
tctatacaac aattgtgtcc atgctgaatt ctctgattta ggcctgagga ataagtatgt 780
caaatttact ctaaggaagg tggtcaagaa acagaatttg cacgtg
<210> 1045
<211> 693
<212> DNA
<213> Mus musculus
<220>
<223> MOR171-39P
<400> 1045
gtggttctgc tgattctagt aaaataaaat attataagta aaagttttat aatcaccatc 60
agttcccage ttcactctcc agtgtattct ctcagtcatt tatccttcat taacttctgc 120
tattcatctg tcattatccc taagatgttg gtgaacttgt atgtgagaag gacatgatct 180
ttttggagtg tatgattcag ctgtacttca tcatttttgt cattgcagga ggctccctgc 240
tgacagccac aacctatgac tgccagggtc cagcctctgc acaggatcag agttctaaac 300
tggaagcagg gatacctgga agacgcataa caaacacaca tagacacctt tttcaggaac 360
aatctctcag qcaagtttcg aggcttgagg ttgctcttca tctctctgtg tctctttgtc 420
totatototg totototott otgetototg ctotgtotgo acatactott cactotootg 480
cacactttgc ttttctcttc tgcactttgc ttttctcaaa ctccccatgt ttctacacac 540
ctctqtqtac tcacctttca ctcacacata tactatttac acacacctca cacacattcc 600
teteatgtgt tettteacte acatagaeae acceeteaca eteaetetet tettgtaete 660
tttctcacac actccatatt cctcttgcct ttt
                                                                   693
<210> 1046
<211> 669
<212> DNA
<213> Mus musculus
<220>
<223> MOR136-17P
<400> 1046
ttatttttca agttctatta ttagtcttag tcatttttca ttacccacag aaaaaacaat 60
actgacctga gcagctttcc aattacatca atgatgtatg tccactatat ctccactaca 120
ttagtatcat gagaaaagag cttggtgcat tattagaagc tgttttttgg atcttgtaca 180
atgccagete etteactige gtettetaac attgttgete ttetgtgetg atggcatget 240
tctgttaaga cctaactgcc atgatcaaat tatcctgctt agataccttc ctaaaagaat 300
tggtcatgtt cacagtcagg gtggcagtca ttatttggca tttatatgta cattggtatc 360
ttatggatac actggggcca cagtcctgag gggcccttcg accatgggga tttataaagc 420
attgtataca catggcttct acctcttggt ggtgtcttta tattatgggg gtattttgga 480
tagtacettt teecagaatt aageaatagg atggacaagg acaceattat agetgteatg 540
taaacagetg teacaceeat gttaaatete tteatttgta atetaagaaa tagggataca 600
aaagaagcac tagggatact cttgtcaagt aagaggtttt acatgataac atctgaatac 660
tttcactga
                                                                   669
<210> 1047
<211> 935
<212> DNA
<213> Mus musculus
<220>
<223> MOR175-8P
<400> 1047
atggaagata agaatgagac catagtgagt gagtttttat ttctgagcct cacaaatcgt 60
```

```
ctctatcaga agattatact tttcatcctg ctcctcttta tcttgtgaca ctgggggggg 120
caacttgggt atggtcactg taatatgggt ggaccccaga tttcatactt ctatgtacat 180
tttattagcc acttgtcttt tgtagatatg tgttcctctt cttccatagc tcctaggatg 240
ctgtatgata tatttacaga qaaaataaaa acatctcctt tgtgtgttgt actgtatagt 300
tatggtttgc tggtcttttt gagggaactg agtgtttcct cctagctgcc atggcatatg 360
atcagtacac agecacetgt aagecettae tgtatactet aattatgtee aagagggtet 420
gtgcacagtt tgtcatttgg ccttatcttc tggctgctat aaacatcaaa actcatgaaa 480
cettgacett ttgettacea ttttgtggtt ceaatactat caacatttet tetgtgatat 540
ttccccaatg cttgtcttag catgtgctga ctcctccatc aacaagatag tggtctttgt 600
cttggatgga gcaataggag tgtttagtgg tgtgatcatc acagtctcct acatctctat 660
tttgatggcc atcttgaaga tccagaccac taacaggaga atgaaagact tctctactta 720
ttcctctcac ttggcaggtg tctctatcca gtatggaact gtgctcttca tctatgttcg 780
acctagtaca tatactgaac acgaataaag ttatttctct attttatact gtcatgattt 840
ccatgctgaa tcccctgatc tatagcttga ggaacaagga agtgaaaaat gcactcagaa 900
gaaaagtaca aaggaaacat ttttcaagag attgg
                                                                 935
<210> 1048
<211> 763
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (746)...(763)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR0-11P
<400> 1048
atgaaagcct ttagcagccc cagcaactcc agcaccatca ctggcttcat cctcctgggc 60
ttcccctgcc acagggaggg gcaaatcctc ctctttgtgc tcttctccat tgtctacctg 120
cttaccctca tgggcaatgc ttccatcatc tgtgctgtgt gctatgatct tcctccttct 180
ctttctttct atcccaaaca gtgcttggga atatctcaaa ttagaatgac tatggacagt 240
tatatttcca cacaatttct ttttgttttc ttttttcttt ttaaattttt tcagtcaact 300
ttttatttat ttatttattt atttatttaa tttacatttc aaatgttatc acctttccta 360
ctttcccctc ctaaaatccc ctatgccctc tcccctccct cctgtttacc aacccaccta 420
ttcctgcttc ctggccctgg cattcctcta ttttggggca tagaaccttc acaggaccaa 480
gggcctctcc tcccattgat gacctactag gccatcctct gctacatatg catctagagc 540
catgtgtttt ctctgattgg tggtttagtc tcagggatct ctgggggggt actggctagt 600
ageteettea ttggggttat gtttttetaa attetattae eecaaceate tatgetaeae 720
ttagatattc agcttggttt ttctcnnnnn nnnnnnnnn nnn
<210> 1049
<211> 690
<212> DNA
<213> Mus musculus
<220>
<223> MOR162-9P
<400> 1049
gaatgttggt gggttttgtg aagcagaaca tcattttctc atgctgagtg cttgactcag 60
ctttttttct ttgccttctt tgttattgat gaatgctaca ttttgacagc aatggcttat 120
gacagatatg ctgccatttg taagcccctg ctttaccagg tcaccatgtc tcatcaggtc 180
tgcctattga tgactatggg tgtgtatgtg atgggctttg caggtgcctt gtcccacata 240
```

```
gtttgcatgc tgagactcac cttctgtgat ggtaacatca ttaatcacta tgtttgtgat 300
gtacttcctc tccttaaact ctcctqcaca agtacctcca tcaatgagat ggtagttttt 360
attgttgtgg gtgtcaatgt gatagtgccc agcctgactc tctttgtttc ttatacctta 420
atcettteca acatecteag catecattet geagaaggta gateaaaage etteagtace 480
tgtggctccc atgtgatggc tgtttctttt ttctttggag ctgcagcctt catgtatctt 540
aagcetteta gtgeatetgt ggatgaagag aaattateta eeatetttta taccattttg 600
ggtccaatgc tgaatccttt catctacagt ataaggaata aggatgtcca tcttgcactg 660
agaaaaacat tgatgaaact gaggttttcc
                                                               690
<210> 1050
<211> 832
<212> DNA
<213> Mus musculus
<220>
<223> MOR162-10P
<400> 1050
ggccacacct cctaatagtg ccaatcccta ggccaagcat ttatcctgct gggcttgaca 60
caacagccag aacttcagct acctetette ttecagttet tgggaateta tgtggtetee 120
attgtgggga acctgggctt gattgttctg attgtcttga atcctcacct ccacaccecc 180
atgtactact ttctcttcaa cctttccttc acagacctct gctactcctc tgccataacc 240
cccaaaatgc tggtgggttt tgtgaaccag aacatcatcg ctcatgctga atgcttgact 300
cagctctttt tcttctgctt ctttgttctt gatgaatgtt acatttgtac agaaatggcc 360
tatgacagat atgctgccat ctgtaagacc ctgcttaacc aggtcaccat gtcccatcag 420
aaaatctttt taaatgtaca tatctatttt attattttt agtttgtttg gggacatcat 540
atcoctaaag totttoatgo taagcaagtg tttaaccact gacctacato ttaagagtag 600
gcacatttgt aagttttgtg tggctgtctc agacaatgtc ttactacttc acatagcaaa 660
cctctgggat aatttatagg agagttcatt ttaaaggctc atttgctgct caaaaggctg 720
aagtaaggag ggaaaatgaa aacteettte tttetggtet ttttteattg tettaaagea 780
gtttcgtaaa gagggcttaa caagttatca accaagcaat atacatgact cc
                                                               832
<210> 1051
<211> 657
<212> DNA
<213> Mus musculus
<220>
<223> MOR0-12P
<400> 1051
gaatctggtc ccctccccct tccttcataa ctagtgtggc aacaataaaa tttgagcttt 60
caggitticca aaatgcatti ccaggetaga acccaggittg tggtctgctg gccggacaca 180
acaattaggt ttgctggaag ctctgtccac acaggctgtg tctttctata aggacatgcc 240
atcaatcact aattgtttaa tattctgacc ctccttcaac tttcttgagc caccacctat 300
gttaatagtg gtaattetga taggtgtatt atateaeagt eeceagtttt accateetta 360
tttcctatgt tttcatcttc attaacattc taaatatcaa atccatgcaa agaatatcaa 420
aagacttcag tatttgtaga tttcacattg cttcaattta tgttttcatt gagtttacag 480
cattcaagtg ttttaaatat tcatatggat ctatagacca aggattttat tttctgtttc 540
tacactgatg tgatactcat cctcaacatt ataatctata gtatgtgtat catggatgta 600
qaaatqqcac ttatqqatqc tttqatqaaa tttcaqaqaa atqtatttca tttataq
<210> 1052
<211> 829
<212> DNA
```

```
<213> Mus musculus
<220>
<223> MOR171-40P
<400> 1052
ttgcaaattc tttggaaaaa gaaggggatt gcagagcttc agttgctact gttcttcaac 60
ttactagtgg tcacaattgt cggaaacctg gacacactca tctccattct gtttagttct 120
caactacaca cacctgttgt tatttactaa gccgtctgct ctttattgac tgctctaagt 180
actaagaatg catacctcag tactacttct gtgcttttgg tgctgcaaaa tgtgttctgc 300
tggctgcagt ggcatatgac ctctgtgttg ctgtccacaa tcctttactt tacaatttaa 360
tcatatccta tcaactctgg tcctagattg tggttgggta tatggtaggg gtttactatg 420
taccgtagct cacactgtct ttgtgctaag agttttttgt ttcctgcaag actggtatat 480
taaaccatta ctctcgggtt ctagtacttt tatcagtgaa ttattagtcc agtgcattta 540
atctcactct totatgtctg ggcattctta gctattatat cttcatcatt tttagtttat 600
tccaaagtat tcaaagtact tcaactgacg gcaggtccaa agcctttagc acttgcagat 660
ccaqtatttt qqctqttact gtgttttggg gttacatcct agcattatct tcatagacga 720
aggaaaagtg ttgactatgt cttataccat ccttgagtcc atggtaaaat cgagaatcta 780
tagcctcaga aataaagatg ccaaagtggc catgaaaaac tatccaggg
<210> 1053
<211> 914
<212> DNA
<213> Mus musculus
<220>
<223> MOR214-8P
<400> 1053
atgaatgcca ggggaaacag tactgagatc acccagttca tcctcctggg agtcacaaat 60
ttacccagaa taataatact gctctttgtc acatttctgc tcatctacat tacaactctg 120
acctggaatc tgtccctcat tgtgttaata agaatggatt cacacctcca cactcccatg 180
tattictitc totataacct giccatcata ggactitgct atgicacctg cacagiccca 240
aaaaaaatgc tctcaaactt tttccaggaa aagcaaacta tcagctttgt gggctgcatt 300
gttcagaatt catcttttc accatggggc tgagtgagtc ttgtctcatg gcagccatgg 360
cetatgaceg gtatgetgee atttgtaace etettetgta tgeategate atgteaceca 420
ctttttgtgt actgaaggtg ctggaatcct atctctctgg gatcactgct tctttacttc 480
agttgtttgc tttgcttctg tggaactaat gtcatcaagc acttcttttg tggcatqcca 540
caqttqttag ttctqtcctq catagacaat tcctqactqc catattaaca atgatctttq 600
gatttgtaaa catgctagtt atcatgatat cttatggcta tattgtcatg tccatcctga 660
agatcacgtc agctaaaggc agatccaaag cattcaacac ctgtgctcca cacttgacac 720
ctgtttccct attcctcacc tccagtatct ttgtctattt gagttcaagt tctgqtqqct 780
cctccagttt tgacagattt gtgtctgttg tctacactgt ggtgattccc gtgttgatcc 840
ctttgatata cagtctgaag aacagagaaa tcaaagatgc tatgaagagg ttaaagaaaa 900
agacaatctg cagc
<210> 1054
<211> 859
<212> DNA
<213> Mus musculus
<220>
<223> MOR137-1P
<400> 1054
accetectee tggggtteec cateagacea gaacageagt acattttett caccetacte 60
```

```
ctggccatgt gtctgacaac tgtgctcttc atcctgcaca tcctgaactc atctccacac 120
ceteatgtae ttatteetea teatettgea catatggetg gatteteace eccaagteee 180
catgtacttc tttctcagcc acttggcttt ctgtctcatc agttactgtc tcagagatgc 240
tetggageat ceagacteag cacetaagea tteeetatga ggggeattte teaaatetag 300
tttttcctta ctttttctat atgttggcaa tttgcttctt gaaatggtgg tctatgagag 360
gtatgtgtct atctaacatc cactgtatta caccattgtg atgagggagg agctgtatga 420
cttactggtg tctgggtgtt gcttcatttc ttatatacat accctgttgc atactccctc 480
ctgtgtcatc catcccttac catttctgtt atttcaatga gcacttgaag ctgtcctgcc 540
taaacacccc cttcaatgag ttagtgatct tcattgaggg agtgttgact ttcctgccac 600
tgggtaccat ttcaggccct tatatctgta ctggggctac tgttctaagt gtccctccat 660
gaagaatatc tacaaagttc ttcatggtgc ttttgcacta taggtacttg caattattta 720
tttctttcat ttctcaaata attccaaatt taaggttgtg attgtttcag ttatgtacac 780
agtggtgaca accatgctga accecttcat ctacagcata gaaatataaa aattggcaca 840
tggaccactt tatagaaaa
<210> 1055
<211> 915
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (501)...(603)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR189-4P
<400> 1055
atggaaaacc acagcctcac attggtgact gaattcatcc tgatgggtat aactgaacgc 60
cctgaactgc aggccccatt gtttggactg ttcctcatca tctatatttt ctcactggtg 120
ggcaacttgg gcatgatcat ccttaccatg gtggaatcaa ggctacaaac acctatgtac 180
ttttttctca gacaccttgc tactactgac cttggttatt caacagctgt gggaccaaaa 240
atgttaagaa gttttcttgt agaccaaaat agaatatcat ttcatttctg tgctgtccag 300
tttgctttct ttagcatgtt cattattagt qaatttttta ttctgtctgc aatgtcttat 360
gaccottatg tegecatetg taaaccaete etetataatg teattatgte acaaagagtg 420
tgttgggtcc tagtgacaat cccatacctt tagagtatat ttgtcgctct catagccacc 480
nnntcaccac tggtcatcct tgtttcctat ctgctcattc tcagagctat tctcaggatg 660
aactctgctg agggcaggca gaaggctttc tccacctgtg gatctcatct gacagtagtt 720
attgtattct atgggacatt gatttttatg tatgtgcaac ctaagtccag tcactcctta 780
aacactgaca atgcagette tattttttat accetaatea teettatgtt gaateeettg 840
atctacagct taagaaacaa agatgtaaaa tattccatta gaaaaacagg gaaaaccata 900
caaaatatct tttcc
                                                               915
<210> 1056
<211> 902
<212> DNA
<213> Mus musculus
<220>
<223> MOR188-6P
<400> 1056
atggagaaat ataateteac aatggtgact gaatteatee tggtgggeat ceettaceac 60
cctgagtttc aggtactatt gtttggactg ttcctcatca tttatctgac ctcactggtt 120
```

```
ggcaacttgg gcatgatcat ccttgccatg gtggattcca ggctgcaaac acccatgtac 180
ttctttctca gacatcttgc tactatagat cttggttgga gaccaaaatg ttaaacaatt 240
ttcttgtaga tcaaaatgca atatcatttt atgcctgtgc tatccagtta tctttcttta 300
gtatgttcac tattaagaaa tttttattct ttctgcaatg tcttatgact gttatgtggc 360
cttctgtaaa ccactcctct acactatcat catgtgataa gcaatatggg catgatcctc 420
attactattg tggactccag gcagaaaaca cccatgaaca ttttcttcag acatgtagca 480
actacaattt tcatttatta aacagctgtc aataccaaaa ttttgagata ttttattgtg 540
gatcaaaacc agtatctttt agactttttg cttcacaaat tagccttcta tattttcctc 600
atagcttgtg agctttttat tattttataa tctctgtgac cagtatgtgg ccagtagcag 660
caaacctctg cttttatggt catcatatca aaaagagttt gttggtgtct agtggcgatc 720
attaacttta cctgacaact ttgcctgtta taatgaaaat taagatgttt actttgtttt 780
tctgtgtgca caagtcatca gtaatttcta atgcaacagt cttccttttt aacgttgctc 840
tgttcgaata ttcacaaaat tgaacagatc atttgatctc ttcagctttt ttccctcttt 900
<210> 1057
<211> 828
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (416)...(435)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR191-2P
<400> 1057
atggagaaac agaatctcac agtgctgagt gaattcattt tgaaaggcat cactgaccgt 60
cctgagatgc aggccccact ctttgggttg ctcttcatta tctatctgat ctcagcagtg 120
ggtaatttgg gcatcatcat tattactaac gtgggctcca ggctctgcat acccatgtac 180
tttttttctc aaacatctgg ctttcactga tcttggatat tctacagcca ttggaccaaa 240
aatgttagtt aattttgttg cagaqaataa ttcagtctcc tattaccttt gtgctacaca 300
gttagcttgc tttcttcttt ttattacttg qqaactttta attttttctt caatqtccta 360
tgaccggtat gtgcctatat gtaaccctct tctctatact ggcatcatgt cacaannnnn 420
nnnnnnnnn nnnnntgaat tttgggtact aatcctaact ttttttatta taattatatt 480
agagaagaaa ataaaagtgc ccttgctttc cttcaggggg aaggggagaat ttaaatagca 540
ggacttgagt acactetgta tagagtagta teaegttgaa gtgtcaagtg ateacaaatg 600
tgtgtcattg agttttatga tgtctgggaa agccaaagag actttgaatt gtttgtgtag 660
tttattaaca tttcagtgaa aaaaaatgta gggtccattg tgtgtttatt tctgtttttc 720
tatggtgtat agaggcaggc tttctatttt aggctacaat tcatttatat gtgttgcctt 780
caaatgaaat ttgattatga catcaaactt ctaatttcag ttcattat
<210> 1058
<211> 813
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (582)...(687)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR248-13P
```

```
<400> 1058
atggatggag gcaatcaaac aattgtatca gaatttatac tccagggact tgccaactca 60
aagaatatto aggtottact ottoatgata ttgttgacto tttatottot catcatgtot 120
ggaaatattg tcatactgat cttaataact actgaccccc atctcctttc ccccatgtac 180
ttettgttgg ccaacatgte etttgttgat atgtggetet etteaaacat eacteetaag 240
atgatcacag gttttctcag ggaaaacaag accatttcct ttgcaggatg catgtttcag 300
gtcttttttt cccattgcat tgctgcagga gagatggtgc tgttggtggt aatggcttat 360
gatcactatg tggccatctg caaaccactc cactacatca ccatcatgaa ccttaagaga 420
tgcactgggt tggtgttcac ttcctggata attggcttta ttcatggtat aagtcacttg 480
gtagtggttg tgcatctgcg tttttgtggt cccaaqqaaa cagacagttt cttttgtqac 540
atgccactgg taatcaagct agcctqcatg gattcccata annnnnnnn nnnnnnnnn 600
nnnnnnnn nnnnnnnnn nnnnnnnata aagttgtact ttacactttt tgaccaaact 720
cacatgttta aacagggaat aaaatattaa taaatttttc ccqagtattc atctgtagat 780
gctatacata cccccaaatt gtcaacttct att
                                                                813
<210> 1059
<211> 706
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (267)...(286)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR0-13P
<400> 1059
acacacagg aggactetaa teaaactgtg gtttetgegt ttattttea gggactgtgt 60
acctcaaggc aacttgagat cttcctctta ctaccatttt ctgtcctcta tctgatgact 120
ttggtagata acctetttgt agtgatattg atcateactg atcateattt caatteteee 180
atgtactttc tgtcagctaa tctatcattt ggtgacttct acctttcctc agtaaataca 240
cccaaactga ccatagatct cctaaannnn nnnnnnnnn nnnnnntctt aatgagtgtt 300
ctattgctgt gaagaaacac cttgaccatg ccagctttta taaaggaaag catttaattg 360
ggaatagctt gcagtttcag aggtttattt cattctcatc attgtgggta gcatagcagc 420
atgcaggtac acatggtact ggagatatag ttgagagatc tacagacaga tccatgcata 480
acaggaagaa agagactctg aacttgaaat aggcttttga aatcacaaat ccttccttca 540
gttgcacact tcctcaaaca agatcatgcc ttctaatcct tctcaagtaa tgccactccc 600
taacgactaa gtattcaaat atattagtct ataaaaggta ttcttattca aggcttttag 660
ccttatcata atgtaaaatg cattcagtcc tacttcaaaa gtctcc
                                                                706
<210> 1060
<211> 943
<212> DNA
<213> Mus musculus
<220>
<223> MOR110-8
<400> 1060
atgaaaaata agtcaatgga acttgacttt attcttttgg gattgacaga tgacccacaa 60
ctgcaaattg tggtttttct gtttctcttt ctcaattatg tgatgagcct ggtggggaac 120
ttaatcattg tgcttctcac cctgctggac cctcgcctca aaactccaat gtatttcttt 180
ctccgtaatt tctccttttt ggaaatcatg ttcacaacag tgtgtattcc cagattcttg 240
acgaccattg tgactggaga caaaactatt acttataata attgtgcagc tcagttgttt 300
```

```
ttcattcttt tqctqqqaqt cacaqaattt tatctcctqq ctqccatqtc ctatqaccqc 360
tatgttgcca tctgcagacc actgcactac cctatcatca tgaacagcaa agtgtgccac 420
caactegtee teageteetg ggtgaetgga ttettgatea tettteecee attggeeatg 480
ggtttgaagc tggatttctg tgattccagg ataattgatc atttcatgtg tgaaacttct 540
cctattttac agatctcctq cacagacact catqttctaq aaatgatgtc ctttqtctta 600
gcagtggtga cacttgtagt cacactggta ctagtgagtc tctcttactc tttcatcatt 660
aagactatta tgagtttccc ttctgcacag caaagaacca aagccttctc cacctgcact 720
tcccacatgt ttgttgtctc cataacatat gggaagttgt atcttcatgt atattaaacc 780
atctgcaagg gagagagtgt ctgtgtctaa aggtgtagct ctgctgtata cttcaatcgc 840
cccctctcct gaaccccttc tttatacact aagaaaccag caggtgaaag aagtcttctg 900
ggatgtatta caaaagactt tgggcttttc aaaacacaaa gtt
<210> 1061
<211> 663
<212> DNA
<213> Mus musculus
<220>
<223> MOR224-8
<400> 1061
tectatgeag gttgtgte ecagetggte ttetateatt teetgggtgg taetgagtgt 60
ttcctgtaca cagtgatggc ttatgaccgt tttgttgcca tatgctaccc tctacgctac 120
teagteataa tgagteatag aatttgtgee tteetggeea tggggaeage agttttegge 180
tgtattcatt ccacctttct aactactctc accttccagt tgccctactg tggccccaaa 240
gatgtgaact attacttctg tgatattcct gtggtgatga agctggcttg tgcagacaca 300
tegaceetgg agatggtagg gtteateagt gtgggtetea tgeeceteag ttgettette 360
ttcatcctca cctcctacag ctgtatagtt cggtccatcc tacagatccg ctccactgag 420
ggtcgacata gagccttctc cacctgcagt gcccatttta ctgccatttt gctcttttac 480
atgccagtga ttttcattta tctaaggcca acaccaagtc cttggttgga tgcaactgtt 540
cagattetga acaatetggt caccectatg etaaateegt taatttacag tettaggaat 600
aaggaggtga aatcatcact gtggactgtc ctacatctgc tgtgcttcct tcccaagcat 660
ttg
<210> 1062
<211> 597
<212> DNA
<213> Mus musculus
<220>
<223> MOR267-11
<400> 1062
atcettetea etttgatggg gtatgacega tttetggeta tetgeaacee eeteagatat 60
cctcttctaa tgaccaatgt tgcatgtgga caacttgtgg cctctgcttg ggttggaggc 120
ttctttattt ctctcattga gacaacactg atattcaggg tgtctttctg catacctaac 180
ctcatcagac acttcttctg ccatatgagg gcagttctga ggctgtcctg cacagacagt 240
aacttcacag aattcattgt aacactgatg tcagtgtctg gtttgctggg tacattcttg 300
ctcatcctcc tgacttatgt gttcatcctt tcttctgtcc tcaagatccc ttcagctgag 360
ggtaaacaaa aggcattttc cacctgtgcc tcacacctca ctgtggtcct catccacttt 420
ggttttgcat ctgttgttta tatgaagcca gaaaactccg gaggagatga cacactcata 480
gcagttccat ataccgtcat taccccattc ctcagtccaa tcatattcac actcaggaat 540
aaggatatga agaatgcttt cagaaagatc atgagaaaga cagtagtctt gaaaaaa
<210> 1063
<211> 551
<212> DNA
```

```
<213> Mus musculus
<220>
<223> MOR231-17P
<400> 1063
agggtatgta ttctcttctt ggtgatggcc tgggcgggag gtcttgcaca tgcttttgtt 60
teaagttete getgtatata atttteeatt etgtggteee aatateattg accaetttgg 120
ctgtgacata tacccactat tactacttgc atgtactgat acatacttcc cttggccttt 180
ctatcattgg caataatggg gcaatgtgca tagtcatctt cactctcctc ctactctcct 240
atgggataat ccttagattt ctcaagaatc acagtcagga agggaggcgc aaagctctgt 300
ccacctgtgg ctcccatatc actgtggttt ttctcttttt tgttccatgt attttcatgt 360
atgttagacc tgtttctagt tttcctattg ataaattcat cactgtaatt tataccattg 420
ttactcccat gttgaatcct ttaatatata ctttgagaaa ttcagaaatg aaaaattcta 480
tggaaaagct cctgcagaaa acattaagtc caagtagaat acggctgtct tcttgctgct 540
tatgttacta a
<210> 1064
<211> 462
<212> DNA
<213> Mus musculus
<220>
<223> MOR114-10P
<400> 1064
accetgataa tttctatcaa tataattgac tetaatatca ttgatcattt tggatgtgat 60
gtaaaccctc ttctgaaaat atcgtgctca gacaagtggt taattgagca gatggtaata 120
tgctcqqcag tattgacctt catcattact cttctatgtg cagtcttttc atacatgtac 180
atcataagga cagttctaaa attcccttct gcccaacaaa agagaaaggc cttttctacc 240
tgctcttcac acatgattgt ggtttccatc acctatggca gttgcatctt catttacatc 300
aaaccatctg caaaagaaga agtgaccatt aataaatgtt tgtccgggct tatttcttcc 360
atatcaccca tgctgaatcc tttcatatat actctaagga acaagcaagt taaacaagct 420
tctcaggact taattaagaa aattgcattt ctcttaaaga ag
                                                                   462
<210> 1065
<211> 401
<212> DNA
<213> Mus musculus
<220>
<223> MOR274-3P
<400> 1065
acatcactct atgaaaccct tgaatgtatg catgctgtgt gctgatgcta ctaatcccaa 60
tatectteat eteagtetee tatacaegga tecteateae tgtetaceae atgagetetg 120
ctgagggccg acggaaagcc ttcaccacgt gttcctccca cattatagta gtgagcattt 180
tttatggggc agetttetat accaatgtae tgccccatte ttaccacaca cetgagaaag 240
ataaggttgt ctcagccttt tataccattc tcactcctat gttgaaccca ctcatttaca 300
gtttgaggaa tagagatgtg gctgtggctc taagaaaagt cctaaggaaa tatgcttcct 360
ctcagagatt acgagtgaga cacatacctg agaaatacta g
                                                                   401
<210> 1066
<211> 693
<212> DNA
<213> Mus musculus
```

```
<400> 1066
caggicctgc ttatcttctg gttcaacatg aaacccatca gctttgtggg ctgcttcctg 60
cagatgtttg tcatgaatac cttccttcct atggaatcct ctacctttct ggtcatggcc 120
tatgateget atgtggetat etgecateet ttgtggttee tatecateat caaaaaacag 180
tttgtcatta atgcaggcat ttttattgtt gtccgcaatc ttctagctac actgcccact 240
ccagttctgg ctgctagact caattactgt gccagcaatg tggtggagaa ctgcatatgt 300
gccaatattt ctgtagcaaa actttcctgt ggggacattc gcctaaataa gctctatcaa 360
tttgtgagtg tttggtgcct actaggttct gatctggtcc tcattttgct ctcttactgc 420
ttcatcttga gggttgttat gtgtcagcag tctggaggca ctgtcaccaa ggccttgagt 480
acttgtggtt cacatctcat ccttatactc ttcttctata ctttgttgct agtctttatc 540
ttcacaaaca aggcaggaaa gaagataccg tcagaggtac caattcttct taatgtgctg 600
catcatetea teccaeetge ceteaateee attgtgtatg gagtacgaae ecaggaaate 660
aagcaggga ttatcaagct attcaaacac tag
                                                                   693
<210> 1067
<211> 937
<212> DNA
<213> Mus musculus
<220>
<223> MOR245-18
<400> 1067
atgaatgaag caaattactc agaagtatct gaatttatat tcctgggact atcaacctac 60
agaccaacac aatattttct ctttgctttt gctataatat catatgcagc aacatttctc 120
ggaaatttct cagttgtgtt tatagtgatc tttgaccctc atttacattc acccatgtac 180
ttccttttag ctaatctttc attcgttgac ttttgttttt ctacctcaac agttcctaag 240
ttgatttctg acctgtactc aggtcacagt atcatttcaa tccagagctg catcttccag 300
atgtttgtcc tccatctact ggggggatgt gagatggtgt tgctggtagc catggcctgg 360
gacagatatg tggccatatg caaacccctc tactacctga ccatcatgaa cccacggatg 420
tgtcttttgc ttttgattag tgcctggatt attggtctca ttcattcagt ggctcaatta 480
gcttttgttg tccatttgcc tttttgtgct tctaatgaga tagatagctt ttactgtgat 540
cttcctcgat tcatcaaaat ggcctgtata aacacctaca gaatggagtt cttggttact 600
gctgacagtg gatttatttc tctcagtacc ttctttttat tgattatctc ttacatcttc 660
atactgttta ttgtacggaa acagtccttg ggcagtttgt ccaaggcctt ctctacactt 720
tctgctcaca tttgtgtggt agttttgttc tttggaccat gcatctttgt gtacatatgg 780
ccatttecta ctgtgccagt gggataagtt cctggccatt ttggacttca tgattatacc 840
catectgaac cetgecattt atacaetgag gaacaaagae atgaaggtgg caatgagaag 900
actgagtgtt caactcctga gtaggaaaag tatctgc
                                                                  937
<210> 1068
<211> 684
<212> DNA
<213> Mus musculus
<220>
<223> MOR248-14P
<400> 1068
atggaagact ctaatcaaac tgtggtttct gagtttattt ttccagggac tgtgtacctc 60
aaaggcaact tgagatettt etettattae eattttetgt eetetatetg gtgaetttgg 120
taggaaacct ctttgtagtg atattgatca tcattgatca tcatctccat tctcccatgt 180
acttcctgtt agctaatcta tcatttgttg acttctgcct ttcctcagta aatacaccca 240
```

```
aactgaccat agateteeta aaagaaaata aaaccattte etttggegge tgcatgagee 300
agateetetg tgtgeattte tttggaggaa gtgagatggt gettettgta acaatggeet 360
atgaccggta tgtggccatc tgcaggccac tccactacag cagcatcatg gacagacaga 420
agtgcatctg gctcgttgtg atatcatgga ttgttggatt tgtgcatgcc attagtcagt 480
tgctcttgat tttggatcta ccattctgtg gacctagagt gatagacagc tttttctgtg 540
atattccttt ggtgatgaaa ttagcctgca tgaatactga tactctggaa atcctaataa 600
atgctgacag tggcatttta gcaacttact tgtttcactc tcttactgat atcttatact 660
tatattctat taactgttca acat
                                                                   684
<210> 1069
<211> 813
<212> DNA
<213> Mus musculus
<220>
<223> MOR264-16P
<400> 1069
atggctatca ttggagaaga aaatatgact caaatttcag aaattattct tttgggtttt 60
ggagatotoc atggcottoa gtttottott tttgggctat ttotagcoat ttatgttatg 120
acteteetgg gtaacattgt aatteteace gtagtateea etgattgete eetteacaca 180
cccatgtatt tctttcttgg ccacttctcc ttcctagaga tcagctacac cacaacaatt 240
gagectgtaa tgetgtggac attgttateg geteatgtge etateteett geeageetgt 300
gcttgtcagt tttacttttt tgcatctttg gtggcaacag aatgcttcct ccttgctgta 360
atgtcttatg atagatacat agccatttgt aacccactac actattccag tatcatggac 420
teetggggtt gttteeaget ageattggee tettggttgg etggatttet ggeacetate 480
ttactcatga tcttgatttt tcgcttaaca ttttgttctg ccaatgagat tgaccacttc 540
ttctgtgatt tgaagcccat catgaaactg gcctgcacta atactcaagt agctgaaatg 600
acttetttta tatgtacete attatteget ettggteeet teatactgae ettggettee 660
tatattcaca tcatttgcac cattctgagg atcccttcga ccacagggaa gcagagggct 720
ttctccacct gttcatctca ccttatagtg gtcagtcttt attatgggac tctgggcatt 780
gtctatggct tcccatcaat gcctcaatat gaa
                                                                   813
<210> 1070
<211> 402
<212> DNA
<213> Mus musculus
<220>
<223> MOR34-9
<400> 1070
aagttgccct gtggcaatgt caaggtgaat gccatttatg gtctaatggt tgctctcttg 60
attgggggtt ttgacatcct gtgtatcaca atctcctata tcatgattct gagggcagtg 120
gtcagcttat catcagcaga tgctaggcag aaggccttca gcacctgcac tgcccacatc 180
tgtgccattg ttttctccta tagcccaacc ttcttgtcct tcttttccca ccactttggg 240
gggcacacaa tecetecate ttgecacate attgtggeta atatttatet gettttgeet 300
cccactatga accetgttgt ctatggagtg aaaaccaaac agatacaaga ctgtgtcata 360
aggatttttt cagagtctaa ggattccaaa gctcacggta ta
                                                                   402
<210> 1071
<211> 378
<212> DNA
<213> Mus musculus
```

<220>

```
<400> 1071
ttggcctgcc aggacacagg aaggaacaga gggccaagat gtttgtggcc agagcccata 60
atcttggtct tccctgcaac attaattctt ggctcctatg qacacattgg ctaaaqcagt 120
actaaagggt caagtcaaca gctggacgca gaaaaagctt ttgggacatg tgggtcccac 180
cttctggtgg tttccctgtt ttatggctca gccatttaca catacttgca acccaaqagc 240
agttattctg agagtgatgg aaaatttgtg gccctttttt atactattgt caccccatg 300
ctcaaccetc tgatctatac cctgaggaac aaggatgtga agggggctct gtggaaggtg 360
ctagggagag gcacagac
                                                                   378
<210> 1072
<211> 774
<212> DNA
<213> Mus musculus
<220>
<223> MOR232-8
<400> 1072
tggacttcgg gcctccgcac gcccatgtac ttcttcctgc gccaactggc gctggtagag 60
atctqcttct cactgqacqt qqcaccccgc ctqctqgtqa ccctqctqca qcctqgacqt 120
ggggtgtccc ccacgagctg tgccctgcag ctgctccttg tgctgtcctg tgtcacatct 180
gagtgcttcc ttctcatggt catggcctgg gatcgctttc tggccatctg caggccactg 240
cgctatggcg ccatcatgag cccqcagctg tgctacctgc tagctactac ctgctggctg 300
gcgggaatcc ctgtggcact cgtcttcacc atctggctct ttaacttccc cttctgtggg 360
ccacgtggca tccgacactt cttttgtgac atagcacctc tgctgagcct ggtgtgtgca 420
gacaccagag ttttcgaggc caatgtgttt gtggccaccg tcctcgtcat catggttccc 480
ttctgtctca tagccacatc ctatgtgatg attctggttg ctgtccttag gatgccatcg 540
geetetggge gecaeaagge cetgteeace tgegeeteee ateteatagt ggtaattetg 600
ttetatggca caacaggggt catecaettg egececaagg ceagetaete tecagagage 660
aagcaagtgg tgtcgctgtc atacaccatg gtgaccccta tgcttaaccc cctcatctac 720
agectgegga acaaggaggt caaggetgee tttgggegtg tatgetgtgg acge
<210> 1073
<211> 704
<212> DNA
<213> Mus musculus
<220>
<223> MOR23-3P
<400> 1073
ccccaaatgt tggccatatt ttggttaggg cttattcctg gcctttgatg cctgcctagc 60
ccagctette tteatecata teetgeaggg catggagtet ggeattetgt tggeaatgge 120
ttttgatcga tacattgcaa tctgtgatcc tctgaggcac acatccattc ttaaaccttc 180
aattettggt eggatgatag tggtggtggt aatteaageg gtagtgettg taggeetgtt 240
acctattcta ataaaaagac tgcaccattt tcaatccatt caaattgccc actcttactg 300
tgaacacatg actgttgtga agcttgcagc aaaccgtgtg caggtcaata agatatgtgg 360
tetetttgtg ggggttgage gttetgggat ttgacatgtt ttttateete atateatatg 420
ccctgatttt ctaagctgtt tttcacctta aacagaagga ggcaaggctc aaagccttta 480
acacctgcac agetcatatt tttgtttttt tagagttcta tattcttgcc tttttctcct 540
ttttaagcca ccgtcttggt catgttgttc cctccaccca cattcttctg tcaaccatct 600
acctectett geeteetget eteaaceeta ttgtetatgg agtgaaaage atggteattt 660
aaaaacgggt ggcacagatc ttttttctag atcatgcaca tcag
```

```
<211> 544
<212> DNA
<213> Mus musculus
<220>
<223> MOR23-4P
<400> 1074
atgctgagct ccctgaaaac caataacgtg acatatctga accctggaac tgtaatattg 60
attggaattc ctggactaga gcacgtgcag ttttggattg gatttccatt ctttacagtg 120
tgtctggtgg ctcttttggg aaatatcatt ttattaatca tcatcccage cgagcatage 180
ttacaccaac ccatgtacat cttcctggct gtgctggcag ctacagacat aggactttgt 240
gcagccattg cccccaaaat gttggccata ttttggttca gggcttattc catqqccttt 300
gatgcctqcc tagcccaact cttcttcatc catacccttc agggcatgga gtccggcatt 360
ctgttggcaa tggcttttga tcgatacatt gcaatctgtg atcctctgag gcacacatct 420
attettacae ceteaattae ttggteggat gatagtggtg gtggtaatte gageggtagt 480
qcttqtaqqc ctqttaccta ttqtaataaa aaqactqcac cattttcqqt ccattcaaat 540
tgcc
<210> 1075
<211> 939
<212> DNA
<213> Mus musculus
<220>
<223> MOR190-3P
<400> 1075
atagagaagc acaacctcac aatggtgact gaattcatcc tggtgggcat cactgaccac 60
cctgagctgc aggccccatt gtttggactg ttcctcctca tctatctgat ctctctgatt 120
ggcaacttgg gcatgatcat ctttaccatg gtgaattcca ggctgaaaac acccatgtac 180
ttctttctaa gacacctcgc tactactgtc cttggttatt caacagccgt gggaccaaaa 240
atgttacaaa attttcttgt agatcaaaat acaatatcat ttcatctttg tgcgatccag 300
ttgtctttct ttagtatgtt cattgcttgt gaaatttata ttctgtctgc aatgtcctat 360
gaccactatg tggctatctg taagcctctg ttctatatgg tcatcatgtc aaaaagacta 420
tgctgggtgc ttgtagtaat cccttatgtc tactgtacaa ttgtggcact tttaatcaca 480
attaagattt teaetttgte tttetgtgge teeaatgtea teagteattt etaetgtgae 540
agtetteett tgttatettt ggtetgetea aatacacaag aaattgaggt ggtgttgttg 600
tacttatcag cttttaattt gatttcctct cttctgcttg ttcttgtgtc ctacctgctc 660
atteteatag etatteteag gatgaaetet getgagggea ggegeaagge ttteteeace 720
tgagggtccc acctgacaat ggtcactgtc ttctatggga ctttgatatt tatgtatatg 780
cagcccaaat ctaatcattc ctttgatact gataaagtgg cttcaatatt ttataccatg 840
gttatcccca tgtttaatcc cctgatctac agcttgagaa ataaagatgt aaaagatgct 900
ctccttagga catggaaaaa aaaatacatg gttttcttt
                                                                   939
<210> 1076
<211> 941
<212> DNA
<213> Mus musculus
<220>
<223> MOR187-4
<400> 1076
atggggcaac agaatacaac atcactgcct gggttcatct tgatgggaat cacacaqcqc 60
actgagette agetteettt gtttggggee ttetteatea tetatgeagt cacagteatg 120
ggcaacctgg gtatgatcat tttgactaag ctggactctc acctagaaac ccctatgtac 180
```

```
tttttcatca gacatctggc ttttattgat cttggaaatt ccactgtcat ctgtcccaag 240
atgctggtgg attttgttat gaatgacaaa accatttctt tctgtgaatg tgctacccag 300
ttgtcctttc ttcccttatg tttattatca ctgaattttt tatcttgtct gcaatggcct 360
atgaccqcta tgtqqccatc tgcaaccctc tgctctacag tgtqatcatg tctcagagac 420
tttgtcatgt gcttgtgggc atcccgtacc tctacagcac cgtccaggct ctactggtca 480
ccagtaggat tttcacatca actttctgtg gctctaacat catcagtcat ttctactgtg 540
atggtatttt cttgttacct atgttgtgtt caaatgctga agaaatacaa ttggtgatca 600
tttcattttc agcattgaat ttgatctctt cttttctggt agtccttgga tcatatgttc 660
tgattctgat agccatatgt cgaatgcatt ctgcagaagg caggagaaaa gctttctcta 720
catgtgggtc tcatttgaca gtggttgtgg ttttctatgg tactctattt tttatgtatt 780
tgcaacctaa atctactgac tccttagaga atgataaaat agcctcagtg ttttatactt 840
tagtgatccc catgcttaac cccttgatat acagtttaag gaacaaagag gttaaaaatg 900
ccttctacag ggtactaaag ggtcaattta aaattaacac t
                                                                  941
<210> 1077
<211> 916
<212> DNA
<213> Mus musculus
<220>
<223> MOR182-9
<400> 1077
atggaactga acaggaccca gctgactgaa tttgttctca gaggaataac agatcgttca 60
gagetgeaag teeceetgtt cetggtgtte ttteteatet atgttateae catggtggge 120
aaccttggct taatctttgt catctggaag gaccctcatc ttcacacacc catgtacctt 180
ttccttggaa atttggcctt tgctgatgcc tgtaattcat cctctgtgac accaaagatg 240
cttatgaaat ttttaaataa gaatgacatg atatccatgg gtgagtgttt tgctcaattt 300
tatttctttt gttcaagtgt aactgcagaa gccttcattc tggtagctat ggcctatgac 360
cgctatgtag ccatatgcaa acctctgctc tatgtagtgg tgatgtccaa cagactctgt 420
attcagttca taggtgtatc ctatctaatt ggacttctac atggtcttac ttcatgtagg 480
attgttattt aggttaacgt tttgtagttc caatgtaata gatcatttct actgtgacat 540
cctqccactt tataggattt cttqcactqa cccatcqatc aatqtactqq taqctttcat 600
tatgggtatt ttaatacaag tgagtacctt tatgagtatt atagtctcct atgtccgtgt 660
cetetttgee ateetgagaa caaagtetga gaggggeaga aacaaageet tetetaettg 720
cagttcccac ctgtcatctg tgtctttgtt ctatggcact ctcttcatca tatatgtcct 780
ctctggctct gacacagata attatcaggg taaaatgtat tcactgttct ataccattat 840
catteetetg ctaaacccct teatttacag ceteagaaac aaagaagtea teggtgeett 900
                                                                  916
gagaaaactc agagaa
<210> 1078
<211> 816
<212> DNA
<213> Mus musculus
<220>
<223> MOR183-7P
<400> 1078
atggaaatgg acaacacaac actgctcatt cagtttgttc tctcaggact tgttcatctg 60
ccccagtgga aaatccccct gttcctqctg ttcttqqtca tctatctcat caccattqtg 120
ggcaaccttg gtctgatcac tctcatctgg aatgatcctc accttcacat tcctatgtac 180
ttttttcttg ggagtttagc atttgtggat acttggttat catccacagt gacaccaaag 240
atgctacaag acatttttgc caaqaataaa atgatatctt tctctgagtg catgatacag 300
tttttttcat ttggaatcag tgcaaccacg gaatgttttc ttttggcatc aatggcctat 360
gategetatg tagecatatg caaacettta etetacecag tgateatgae aaatagaete 420
tgtgtacgtc ttttaacatt gtcctttgta ggtggattca ttcatgcttt aattcatgaa 480
```

```
ggctttttat tcaqattaat tttctqtaqc tctcacataa taqaccactt ttattqtqat 540
gttatgccac tgttaaagat ttcctgtaat gacccttcta tcaattacct gatgctcttt 600
attttctctg gctcaattca ggtattcaca attacaacta tccttgtctc ttatacactt 660
gttctgtttt ctatcctaaa gcagaaatct ctcaaaagca taaagaaagc cttttccacc 720
tgtggagccc atctcctctc tgtttctttg tactatggcc ctctgctctt catgtatgtg 780
cgccctgcat ctccacaagt aaatgatgaa gatatg
                                                                   816
<210> 1079
<211> 468
<212> DNA
<213> Mus musculus
<220>
<223> MOR135-24
<400> 1079
ctgatgcata ctctccttqc agcaagattq tctttttqtq agaacaatqt qatcctcaat 60
tttttctgtg acctatttgt tctcctaaag ctggcttgct cagacactta tgttaatgag 120
ttgatgatat ttataatgag ttccctcctc attgttattc catttttcct cattgtcatg 180
tettatgeaa ggateattge etceattett aaggtteeat etatteaagg gatetacaag 240
gtcttctcca cctgtggttc ccatctgtct gtggtgacct tgttttatgg gacaattatt 300
ggtctctact tatgtccatc aggtaataat tccacagtaa aggggactgt catggccatg 360
atgtacacag tggtgactcc catgctgaac cccttcatct atagcctgag gaacagagac 420
atgaagaggg ccctaataag agttatttgc agtaagaaaa tctctctg
                                                                  468
<210> 1080
<211> 457
<212> DNA
<213> Mus musculus
<220>
<223> MOR256-43P
<400> 1080
atggactatt tgaacaccag ttcagaagag ggcttcattt tagtgggctt ctcagactgg 60
cctcatctaq aacccatcct ttttqctttc atttctatqt tctactctct qactctcttt 120
ggcaacaccg tgatcatcat tctgtctcaa ctggacctcc gcctgcacac acccatgtac 180
tactteetet gecaeetete etteetggae etetgetaea etgeeageae tgtgeeceag 240
cttctggtca acctctctgg acttgacagg accatcagct ttggaaggtg tgtggcccag 300
ctcttcataa tgctctcact gggaggcatt gagtgtgtgc ttttggtggc aatggctata 360
gategetatg etgetgtgtg tegeceacte cactacacaa ceattatgea eeetgttact 420
ctgcagagca ttggttgtat tctcctgggt agggggc
                                                                   457
<210> 1081
<211> 576
<212> DNA
<213> Mus musculus
<220>
<223> MOR162-11P
<400> 1081
atggctttaa qaaatgcctc ttcaqtqaaa qaatttatct tqctqqqatt qacacaqcaq 60
ccagggetee agetgeeget ettetteetg ttettgggaa tetatgtggt etceatgttg 120
gggaacctgg gcttgattgt tctgattgtg ttgaatcctc acctgcacac ccccatgtac 180
tactttetet teaacettte etteatagat etetgetaet eetetgteat aaceeetaga 240
atgttggtgg gttttgtgaa gcagaacatc atctctcatg ctgagtgctt gactcagctt 300
```

```
tttttctttg ccttctttgt tattgatgaa tgctacattt tgacagcaat ggcttatgac 360
agatatgctg ccatttgtaa gcccctgctt taccaggtca ccatgtctca tcaggtctgc 420
ctattgatga ctatgggtgt gtatgtgatg ggctttggca ggtgccttgt cccacatagt 480
ttgcatgctg agactcacct tctgtggatg gtaacatcat taatcactat gtttggcgat 540
gtacttcctc tccttaaact ctcctgcaca agtacc
<210> 1082
<211> 633
<212> DNA
<213> Mus musculus
<220>
<223> MOR256-44P
<400> 1082
atgaaatatt tgaacaccag ttcagaagat ggcttcattt tagtgggctt ctcagactgg 60
cctcacqtag aacccatcct ttttqctatc atttctattt tctcctctct qactctcttt 120
ggcaatactg tgatcaccat tctgtcttga ctggacctcc acctgcacac acccatgtac 180
tgcttcctct gccacctctc cttcctggac ctctgctata ccgccagcac tgtgccccag 240
cttctqqtca acctctctqq acttqacaqq accatcaqct ttqqaaaqtq tqtqqcccaq 300
ctctqcataq tqctctcact qqqaqqaact qaqtqtqtqc ttttqqtqac aatqqctata 360
gattgctatg, ctgctgtgtg tcgcccactc cactacacaa ccattatgca ccctgttctc 420
tgcagagcat tggttgtatt ctcctgggtg gggggccttg tgaactctct gatccagaca 480
agccttgtga tggccatgcc tctgtgtgga catcaactga atcacttctt ctgtgagcta 540
cctgttctcc tgaagatggc ctgtgaggac acaggaggaa cagaggtcaa ttcgtttgtg 600
gcccgggtca taatcttagt gtgtccttta ctg
                                                                633
<210> 1083
<211> 531
<212> DNA
<213> Mus musculus
<220>
<223> MOR192-2
<400> 1083
totcataaag tatgttggct totagtcaca atgacctato tttactgtac atttatgtoc 60
cttgtagtca ccataaatat tttctcttta tccttctgtg gctacaatgt catcaaccat 120
cttatagtta tgttctttgc agcttttgat ttgatttctt cccttgtcgt cgtgctgatg 240
tactacetge teatttteat agetgttete aggatgaact etgetgaggg cagaegeaaa 300
gctttctcta cctqtqqqtc ccacctqaca qtqqttacat tattctatqq qacactqata 360
tttatgtatg taaaacctgt atctagtcat tcaattgata ctgaaaaaat atcatctata 420
ctttatactc taatcatccc tttattgaat cccctggtct acagtctgag gaacaaagat 480
gtgaaagaag ctttacaaag aacatgtcaa aaaatattca acacattttc t
<210> 1084
<211> 387
<212> DNA
<213> Mus musculus
<220>
<223> MOR185-8
<400> 1084
cttaaccagc tgtctcaact cacatgttca gacagctttt caagccaact cataatgaat 60
```

```
cttgtacctg ttctattggc agtcatttcc ttcagtagta tcctttactc ttatttcaag 120
atagtgtcct ccatatgttc tatctcctca gttcaaggga agtacaaggc attttctaca 180
tgtgtctctc acctttccat tgtctcctta ttttatagta caggccttgg agtgtatgtc 240
agttctgttg tgatccaaag ctctcactct gctgcaagag cctctgtgat gtatactgtg 300
qtcaccccga tgctgaaccc ctttatttat agtctaagga ataaagatgt gaagaaagct 360
gtggaaagac tattagaagg aaaactg
                                                                   387
<210> 1085
<211> 508
<212> DNA
<213> Mus musculus
<220>
<223> MOR211-6P
<400> 1085
atggccaaga ataatgctac caccataaat ggattcatac taatgggctt tagtgaccac 60
cccaagtgag agattccact attgctggta tttcttagct tttatcttgt caccatgctg 120
ggaaacttag gcatggtcat ttttatccat gtagatgtcc aactccacat cccaatgtac 180
ttctttctga gccatctctc tgtgttggat gcctgctata cttcagtcat cacccctcag 240
atactggcaa cgctggctac aggtaaaaca gtcatttcct atggttgttg tgctacccag 300
ttettettet teactateta tgeaggtaca gagtgtttee acaaacacet tetetetete 360
attetgtgaa aateagatea attittitti tettittatga eeteecaeet etgetgaage 420
tggcctgtag tgacacaatt aaatggttga aattatcatt gttttctttg ggaattttgt 480
aattttggcc aattattgcg tcccqctc
                                                                   508
<210> 1086
<211> 327
<212> DNA
<213> Mus musculus
<220>
<223> MOR211-7P
<400> 1086
ctcgtactgg ctttccacag ccaataccgt agtcatctca ttctctacct cctcatcatc 60
agagttgtca tgagaatgaa gtcttcaggt agaagagcaa agactttctc aacatgtgtc 120
teceaectea etgetgtgge tettttttgg ggacaettgg etttatgtae atacggagtg 180
gttcaagaag ataaaggtat gtctgtcttc tacactgtgg tcattcccat gctgaaccca 240
ctaatctaca gcctaagaaa caaggatgtc aaggctgcat tcaagaaaat tactggtaaa 300
                                                                   327
tgtcagtttt cccacagcac acaacac
<210> 1087
<211> 582
<212> DNA
<213> Mus musculus
<220>
<223> MOR105-9
<400> 1087
aggtatgttg ccatctgtac cccacttcgc tatgcaatca ttataactcc aaagctctgc 60
acacagettt ccacaggete tttcaccete ggetteetca tgeteetcee agagattgtt 120
tggatatcta ctctgccctt ctgtggcccc aatcagattc accagctctt ctgtgactta 180
gaacctatgc tcctcttggc atgtacagac acatctatga ttctggttga agatgtcatc 240
catgctatct ccatcctgag ctgtgtctct atcatcagcc tttcctattt aagaatcatt 300
acceptagtor tgaagattor atotegetgag agtogtoaga aggreattote cacategaca 360
```

```
geocacatea ceattitigt getgtttttt ggeagtgtgg etettatgta eetgegette 420
tetgteacet tecaaceact actggagaag gteattgeac taatgtttge tgteettgee 480
ccatttttca atcctataat ctacagcctg aggaacaagg atatgaaaga tgccattaag 540
aaaatgtttg gttctcaaaa gatactcact gtctctggga gc
<210> 1088
<211> 493
<212> DNA
<213> Mus musculus
<220>
<223> MOR218-6P
<400> 1088
atgactgcaa gaaacatgac aacaatgagt ggattcctcc tcgtggggtt ctctgacaac 60
catgagetge agatettaea ggetttgete ttettggtga catacetatt gggeteagea 120
gggaacttca ttattatcac catcacaaca ctggatccac agctccagtc tccaatgtat 180
tactttctga agcacctttc cattctggac ctctcatccc tctctgtcac aattccccag 240
tatgttgaca gttccctggc acgaagtggc tacatttcat atgcacagtg catgcttcag 300
atttttttct ttgcatcttt tgcctgggga gagctgggca ctctcacagt gatgtcttat 360
gaccgctatg tggccatctg cctcccactg cactatgagg tcataatgag tcccagaaag 420
tgcacttggg ctgtggcagc tgtgtggcta agtgggaggt atctcaggaa cattattcac 480
agcaagtaca ctc
                                                                   493
<210> 1089
<211> 318
<212> DNA
<213> Mus musculus
<220>
<223> MOR253-13P
<400> 1089
ctttatggag gcatcaattt tttacttacc ttgctatcct atggctgcat cattgccagc 60
atcctgcaca tgcgttctgc tgagggcaag aggaaggcct tttctacctg ctcatcccac 120
ctcatcgtgg tttctgtgta ctactcatct ctgttctgtg cctatatcag tcctgcttcc 180
agctacagcc cagaaagaag caaatttacc tcatttttt actcagtcct cagtccaacc 240
ctcaaccccc tcatctatac actgaggaac aaggatgtca agcttgccct gagaagactc 300
ttgccctctt tatcaaat
                                                                   318
<210> 1090
<211> 904
<212> DNA
<213> Mus musculus
<220>
<223> MOR267-12P
<400> 1090
gagaaaaaaa accacacagt ggtaagtgag tttcttttcc aaggtttctc cagctttcag 60
gaatacaagt ttactctctt tatggtattt ctgaccttgt acctgctaac tctgaccagc 120
aatgecatta ttatgataat tateggtatt gagtgteace gteatactee catgtactte 180
tttcttagta tgatttccac ttcagagaca gtgtacacat tggtcattgt accaagcatg 240
ctcgccagcc ttgtgggttc aagccaatcc atttctttgg ctggctgtgc tacccagatg 300
ttcgttttta tcactttggc catcaacaac tgctttctgc ttacagcgat gggatatgac 360
cgctatgtag ctatctgcaa ccccttgagg tcctcagtta tcatgaacaa gagggtgtgt 420
```

```
gcccagctag tatggggttc ctgcaatatt gtcttcaaat tgcatctgta ttcagggcac 480
ctttctgtga cagagaagta gcccactatt tctgtgcccg gttatgaaac tgtcctgtgc 540
tgataccact ctgcatgaca tagttaactt tatcatcagc tcactggtta ttgtggtacc 600
catgggcttg gttttcatct cttacattct cataatctcc accatcctca agattgcctc 660
tgctgaggga cggaagaagg cctttgccac ctgtgcctcc cacctcacgg tggtcatcat 720
ccactatggc tgtgcctcca ttgcctacct caagcccaaa tcagagaaca ccagggatca 780
ggaccagetg ateteagtaa ettaeaetgt gtttaaeeet eteeteaaee etgtggtgta 840
taccttgaga aacaaagaag tcaaggatgc catttaccgt gctattggga aaaaaccttt 900
                                                                904
tgcc
<210> 1091
<211> 714
<212> DNA
<213> Mus musculus
<220>
<223> MOR146-8P
<400> 1091
atggaaccat ataatttaac aggaaccttg gaattcattc tccttggact ctcagaggac 60
cctgaactgc agetcatett atttgeacta tteetgetca tatacatget caetgtgett 120
ggaaatgttc tcatcatctt ggccatcagc tctgattccc acctccacag tccaatgtac 180
ttcttcctct acaacctttc attgtctgac atgggcttca gcagcaccac catccccaaa 240
atgctgataa acttgcatgc ccataacaga tccataactt atgctgaatg cctaactcag 300
gtatetttet tttttetttt tgggggtatg gatageetat tgetggetgt gatggeetat 360
gaccgatggg tagctatttg tcaccctcta tactaccaag tcattctaag cccttgcctc 420
tgtagatgtt tggtcatagt ttcccttttc attagtcttg tgagttcaca ggtacactgc 480
ttattggtat cacaactgac attttgtatt aacgtagaaa tccctcattt cttttgtgat 540
gttccagaac ttgtaaaact tgcttgttct aacactacta tcagtgacat agtcatattt 600
cttttaggca tcattcttgg tttcctccct gcctcaggaa tattttactc ctactataaa 660
attacttett etatttttag agtteeatea etgttaggga aatataaage ette
<210> 1092
<211> 874
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (556)...(624)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR256-45P
<400> 1092
atgagaggtg acaaccacag ctgcttctgg gacaccccaa aggactttat cctcctgggc 60
atttccgaca ggccatggct ggagctccca gtctttgcag tcctcctggt gttctacatt 120
ctggctatgc tggggaacat ctctatcatc ctggtatccc agctggatcc ccagctccac 180
agccccatgt acatattect cagecacttg teetteetgg atetetgeta caccaccace 240
actgtccctc agatgctgtt caacatgggg agctcccaga agaccatcag ttacggtggc 300
tgcacggtgc aatacgccat tttccactgg ctgggctgca ccgagtgcgt tgtcttggcg 360
gccatggete tggaccgeta cgtggccate tgtgagecae teeggtatge tateateatg 420
caccgcccac tctgccagca gctcgtggct atggcctggc tcagcggctt cggcaactcc 480
cttgttcagg tcatcctgac agtgcaattg cctttctgtg gccggcaggt gctgaacaac 540
nnnnnnnnn nnnnnnnnn nnnngggacg gcacaaggcc ttcgggactt gctcttccca 660
```

```
cctgttggtg gtctccctct tctacctgcc cgccatttac atgtacctgc agccgccatc 720
cagttactca caggagcagg gcaagttcat ctccctcttc tattctataa tcacccccac 780
cettaacect tteatetaca cettgaggaa taaggacgtg aagggagete teegaagaet 840
cctggcaagg accggaaggc tgtgtggaag gtga
                                                                   874
<210> 1093
<211> 752
<212> DNA
<213> Mus musculus
<220>
<223> MOR202-32P
<400> 1093
ctgtcattta tagatatatg ctattcttct tctatcagcc caaggatact ttcagacttc 60
ttaaaaacag agaaaacaat ttccttcatt qcttqtqcca ctcagaattt tqttttqqct 120
tggatgggtg catctgagtg ctgcttgctg gctgccatgg cctatgacag gtatgtggcc 180
attggtagec etetgeagta eteagecate atggetecea gtetttgetg gaggatggtt 240
gctggtgtct atgggagtgg attctttatt agctttgttc aacagttgct tgttttaatc 300
tetactattg tgggccaaat gtcattcgtc atttettetg tgacatteet cagateatte 360
cettgtettg etetgatece tteateagee agetggttet ttteetggea getetttttg 420
ttgggtttgg ctctttcctt gttattatct tctcctatgt attcattgca gtttccatcc 480
tgaaagtggc ctcattcgaa ggccgtgtca aagcattcaa gacatgtggc tcccacctgg 540
cagcagtgac tetettetat ggcacaggee tetetgtgta catgcaccac ageteteage 600
actctacaaa gcaagacaag gtgctgtctg tggtctacac catcctcatc cccatggtaa 660
accetetgat etacagtetg aggaacaeag agateaagga ggeeeteaag agagtgetga 720
agaaggcagc acatttacct cagaaagcat ag
                                                                   752
<210> 1094
<211> 902
<212> DNA
<213> Mus musculus
<220>
<223> MOR115-3P
<400> 1094
atgtggccaa gtgtcattgc tatatatttg tttggctggg actcacaagt gagcagggac 60
ttcaaaacag ttttcctatt tccagtcctc acatacatgc tcagcattgg ggggaatcag 120
aacaccgatg cetteacatt geatgagtee caetteeagg tteecatgea ettegtette 180
aggagettet cetteetgga aateteeete acateeaett ttatteetea getgetette 240
agcgtctcta caggaattaa gaccatcagc tttgttggct gcttcattgc cattttcttt 300
ggaaccactg agatttggac tetgacttet atgacetgtg attactacat tgccacetec 360
caatccctac actatgccac cataatgagc aacagggtct gcactctgct gattccctgc 420
tettgtetga gttgetteet aateatette ttgeecatea teetgaceag teaetggatt 480
tctgtgcatc aaatgtgctc aaacatcatt gctgtgacta tgggaccctt atagaaatag 540
cttgttctag cacaaggctg atggagctat ttgctttttc ttagtaatca tgaccttgag 600
agtequeatg gtgetggaga etetectaea tgtgeageat caggaceatt ceaaagatee 660
cttctgcata gcagaggaag aaggcatttt gttcttccca cacacttgtc atctccatct 720
cttacagaag ctgcatcttt atgtgcataa agccttcatc aagaggagtt gtcctcagca 780
aggggatggc tgtcctcaat acctcaqttg ccccattact agacttattc atttacactt 840
tcagaaataa acagttgaaa aagagcttca atgacattac cagaaagact gtaattcttc 900
                                                                   902
<210> 1095
<211> 912
<212> DNA
```

```
<213> Mus musculus
<220>
<223> MOR267-13
<400> 1095
ttcactgaag tgatagagtt cgtcttcctg ggattctcca gctttggaaa gcatcagata 60
accetetttg tggtttteet aaceatetae attttaaete tggetggeaa cateattata 120
gtgacaatca cacacataga ccaccacctt cacactccca tgtacttctt tctgagcatg 180
ttggcaagct cagagactgt gtacacactg gtcattgtcc cacgaatgct ttccagcctg 240
attitttaca acctteccat atecttggca ggetgegeaa eccaaatgtt etttttgte 300
accttggcca ccaacaactg ctttctgctc acagcaatgg gttatgatcg ttatgtggct 360
atttgtaatc ctctgagata tacaatcatc atgagcaagg gaatgtgtgc cttgttggtt 420
tgtgggtctt taggcactgg cctggttatg gcagttcttc atgtgccagc catgttccat 480
ttgccctttt gtggcacggt ggtggagcac tttttctgtg acatataccc agtaatgaag 540
ctttcttgtg ttgataccac tgtcaatgag ataatcaatt atggtgtaag ttcatttgta 600
attettgtge ceataggget gatatttate teetatgtge teattgtete tteeateett 660
aaaattgtgt ccactgaagg ccagaagaaa gcctttgcca cctgtgcctc tcatctcact 720
gtggtcattg tccactatgg ctgtgcctcc attgcctacc tcaaacccaa atcagaaagt 780
tcagtagaaa aagaccttct tctctctgtg acctacacta tcatcactcc cttgctgaac 840
cctgttgtct acagcctcag gaacaaagaa gtcaaagatg ctctatgcag agctqtgggc 900
agaaacactt ct
                                                                   912
<210> 1096
<211> 480
<212> DNA
<213> Mus musculus
<220>
<223> MOR188-7
<400> 1096
attgtctcac ttctagttaa cataaagatt ttcactttat ccttctgtgg ctacaatgtc 60
atcaggcatt totactgtga tgccctccct ttgttaactt tggcctqctc aaacacacat 120
gaaattgagg cgataatttt aatcttctca gcttttaatt tgctttcatc tcttcttata 180
gtaattggtt cctatctact tatccttatg gcaattctaa ggattaactc tgctgagggc 240
aaatggaagg ctttctctac gtgtgggtcc cacctgacag ttgtcatcgt cttttacggg 300
actitigatat tratigitatit geagectaea treacteaet ceatrigaeae tggtaaagtg 360
atttccatct tttacaccca ggttatccct atgttgaatc ccttaacata cagcttgagg 420
aacaaagatg taaaagatgt ccttaaaaaa ccaatggaaa aagtgcacaa tcttttctca 480
<210> 1097
<211> 346
<212> DNA
<213> Mus musculus
<220>
<223> MOR256-46P
<400> 1097
attttaatct tctcagcttt taatttgctt tcatctcttc ttatagtaat tgggtcctat 60
ctacttatcc ttatgacaat tctaaggatt aactctgcta agggtaaatg gaaggctttc 120
totacctgtg ggtcccacct gacagttgtc atcgtctttt atgggacttt gatatttatg 180
tatttgcaac ctacatccac tcactccatt aacactgtta aagtgacttc ccatctttta 240
cacccaggtt atccctatgt tgaatccctt aatatacagc ttgaggaaca aagatgtgaa 300
agatgtcctt aaaaaaacaa aggaaaaagt gtacaatctt gtctca
```

```
<210> 1098
<211> 726
<212> DNA
<213> Mus musculus
<220>
<223> MOR171-41P
<400> 1098
atggaggaca tggcagcagg aaaccactgc acagtgactg agttcttctt agctgggctc 60
tcagagaagc cagaactcca gctgccactc ttcctgctct tcacaggaat ctatctgatc 120
accatggcag ggaacctggg catgatcaca ctgattgggc tcagttctca tctgcacaca 180
eccatgtact atttectcag cagtetgtee tteattgact tetgteagte tacagttgte 240
attectaaaa tgetegtgag etttetgaea gagatgaaca teattteeta etetgaatge 300
atggeteage tetaettett ceteaetttt ggtattgeag agtgetaeae attagetgea 360
atggcctatg accgatatgt tgctatttgt aaccccttgc tttacaatgt aaccatgtcc 420
tatcagattt acagttetet gattteaggg gtatatattt ttgetgtgat etgtteatee 480
tttaacactg gcttcatgct taggactcag ttctgcaatt tagatgtgat taaccactat 540
ttctgtgatc ttcttcccct cttgaatctt gcatcctcta atacctacat caatgaaata 600
ttgattctat tttttgctac actgaattca tttgtcccag tgctgaccat tattacttcc 660
tacatcttca ttattgtcac catcctctcc attcactcca gggagggcaa gttcaaagct 720
tttagt
                                                                   726
<210> 1099
<211> 588
<212> DNA
<213> Mus musculus
<220>
<223> MOR211-8P
<400> 1099
atgtccaatt ccaccctggt taccgagttc atgctggaag attttgctga gaattgggag 60
ctcaggatcc ttctcagtgt gctgttcctg ctggtgtacc tgtacagcct gatagggaat 120
cttatcatca tcattgctac tacagttgac cagacactga acacacccat gtacttcttc 180
ctcaggaatc tatccatttt agatatatgc tacgtttctg tcactgtgcc caatgcttgt 240
atcaactctc tcactgacca caggaatatt tctgtaggtg gatgtgcagc acagatcttt 300
tttgtctata tttgtgcatg tgtagagatt ctatttctta ccatcatggc ccaggaccgc 360
tatgtggcca tttgcaaacc tctcctctat cctgtgatca tgaaccactg gttctgtgtt 420
cagatgacac tggcttccct acttagctca cttgtccttg caagtgtgca cactttcaaa 480
actitic age tgteetictg teactetaat gtggteeete agttetietg tgatatieet 540
tcattgctga ggctttactt gctactgata cctttaataa caaactcc
                                                                   588
<210> 1100
<211> 532
<212> DNA
<213> Mus musculus
<220>
<223> MOR189-5P
<400> 1100
atggcgagtc acaactttac aatggtgact gaattcattc tggtggccaa cactgactgc 60
cctgagctgc aggtcccatt gtttggactg ttccccatca tctatctgat catactggtg 120
ggcaacttgg gcatgatcat ccttaccatg gtggattcca ggctgcaaac acccatgtat 180
ttetttetea gacacettge tactactatt caacagetgt gggaceaaaa atgttaagaa 240
```

```
attttcttgt agaacaaaat aaaaaattat tttatgactg tgcattccag tcatctttct 300
tcagttcatt gttagtgaat ttttttattc tgtatgcaat attttatgac tgctatgttg 360
ccatctgtaa accactcaac tataatgtca ttatgtcaca aagactatgt tggatacctg 420
gtggcagtcc cataccttta cagtatattt gttgctctca tagtcaccat aaatattttt 480
ccttcttcct tgctgtggcc ccaacattat caatcatttc ttttataatg gt
<210> 1101
<211> 645
<212> DNA
<213> Mus musculus
<220>
<223> MOR245-19P
<400> 1101
atgttttttg tggctagcat gatgggaaac agcctcatcg tgttcactgt ggcatctgac 60
ceteacttae acteteceat gtaetttett ttggetaace tetettteat tgaettgggt 120
gtttcttctg tttcttctcc aaagatgctt tatgacttat tcagaaagca caaagtcatc 180
tcctttacag gttgtgttac tcaaatattt ttcattcatg tcattggtgg tgtggagatg 240
gtgctgctca tagccatggc ctttgacaga tatgtggcca tatgtaagcc tctccattac 300
ctgaccatta tgagcccgag gacatgcatc ttgttttcag tgactgcctg ggtggttggc 360
cttatgcatt ctctgattca actggctttt gtagtaaact taccattttg tggaccaaat 420
gtgttggaca gcttctactg tgaccttcct cggtttatca aactagcctg catagacact 480
aaccagctgg aattcatggt cacagtcaac agtgggttca tctctgtggg ttccttcttc 540
atactgatca tttcatatat tgttatcata atcagtgtgc aaaaacattc ttcaggtggt 600
tcctctaaag ccctgtctac tctttctgct cacatcactg tagtg
                                                                   645
<210> 1102
<211> 474
<212> DNA
<213> Mus musculus
<220>
<223> MOR0-14P
<400> 1102
atgccaagca gatctgtgct gggagatgga aaccacacct ctgtggccat gtttgtcctc 60
ctggggctct tggaccaagc tgagctgcag ctcatccttt ttcctgtctt cctagggacc 120
tacctcatta ctctgatttg gaacctgggc cttatcatcc tcatcagaat ggactctcac 180
ctacaaacac ccatgtactt ttttctcagt ttcctgtcat ttatagatat atgctattct 240
tottotatca goccaaggat gotttoagac ttottaaaaag cagagaaaac aatttootto 300
attgcttgtg ccactcagta ttttgttatg gcctggatgg gtgcatctga gtgctgcttg 360
ctggctgcca tggcctatga caggtatgtg gccattggta gccctctgca gtactcagtc 420
atcatggctc ccagtctttg ctggaggatg gttgctggtg tctaccggag tgga
<210> 1103
<211> 417
<212> DNA
<213> Mus musculus
<220>
<223> MOR0-15P
<400> 1103
atgecaagea tatetgtget gggagatgga aaceaeacet etgtggeeat gtttgteete 60
ctggggctct tggaccaagc tgagctgcag ctcatccttt ttcctgtctt tctagggaca 120
tacctcatta ctctgatttg gaacctgggc cttatcatcc tcatcagaat ggactctcac 180
```

```
ctacaaacac ccatgtactt ttttctcagt ttcctgtcat ttatagatat atgctattct 240
tcttctatca qcccaaqqat qctttcaqac ttcttaaaaa caqaqaaaac aatttccttc 300
attgcttgtg ccactcagaa ttttgttttg gattggatgg gtacatctga gtgctgcttg 360
ctgactgcca tggcctatga caggtatgtg gccattggta gccctctgca gtactca
<210> 1104
<211> 473
<212> DNA
<213> Mus musculus
<220>
<223> MOR190-4P
<400> 1104
agaaccaaaa accacacagt qqtaactqaa ttcatcctqa tqqqcatcac tqaccaccct 60
gacctacage ceteattgtt tggtttgttt etteteatet atetgatate aetggtggga 120
aacttgggca tgattattct tacaatggtg gactccaggc tgcaaacacc tatgtatttc 180
tttctcagac aactcgctac tactgacctt ggttattcaa cagctgtggg acccaaaatg 240
ttaacaaatt ttattqttqa tcaaaataqa atattcttta acctttqtac tacacaqtta 300
geettettte ttetgtteat tgettgtgaa etttttatte tgtetgeaat gteetatgae 360
cgctatgtgg ctatctgtaa gcctctgttc tatatggtca tcatgtcaaa aagactatgc 420
tgggtgcttg tagtaatgcc cttatgtcta ctgtacaatt gtggctgctt tta
                                                                   473
<210> 1105
<211> 582
<212> DNA
<213> Mus musculus
<220>
<223> MOR106-10
<400> 1105
ttcctqqcaq tcatqqcatt tqatcqatac cttqccatct qtaqqccact acattatcct 60
teteteatga etgggegeet eegaaacaee ettgtgaeea gttgetgggt gettggttte 120
ctctggttcc ctgtacccat catcatcatc tcccagatgt ccttctgtgg gtccagaatt 180
atagaccact teetgtgtga eccaggeeet ettttggeee ttgeetgtte eagagteeea 240
ttgatagagg ttttctggtc cattataatg tctatgctcc tggttattcc tttcctcttc 300
atcatgggaa cttacatatt ggtcctaaga gctgtgttta gacttccttc aagagaagga 360
caaaaaaagg .ctttctccac ttgcgggtct catctcacag tagtttcact cttttattgc 420
tcagtgatga taatgtatct gagcccaaca tctgagcatg aggccggaat gcagaagctt 480
gtaactctat tttattctgt gggtacacca ctgcttaatc ctatgatata cagtctgagg 540
aacaaagata tgaaaaatgc cctacagaag attttgagaa ca
                                                                   582
<210> 1106
<211> 537
<212> DNA
<213> Mus musculus
<220>
<223> MOR182-10P
<400> 1106
ttcctactgt cagtgatggc ctatgaccgc tatgtggcca tatgcaaccc tttgctttat 60
ccagtaatga tgtccaatag cctctgtatg aaatttatac atgtttcata tattgtaggt 120
tttctacatt cagcaattca tgtgggcttg ttagtgagat taaatttctg caagtccaac 180
atcatacact atttctactg tgaaatcttg cagttattca aaatttcctg cattaatcct 240
acaatgaacg teettetggt tttaatattt teaactttga tacaaggttt gaettttatg 300
```

```
acttttattg tetectaete etetgteatt ttteecatee tgaaaacaaa gtetgagagg 360
ggcagacgca aagcettete cacetgcagt geteacetge teteegtgte tetgttetat 420
ggcacacttt tcctcatgta tgtgcatcct gggtctggat caggggaaga taagggcaga 480
atgtattctt tattttacac aataataatt ctatttctaa atcctttttt tattacq
<210> 1107
<211> 793
<212> DNA
<213> Mus musculus
<220>
<223> MOR259-7P
<400> 1107
acacacaget geacacteee catgtactte tteeteteta eceteteeet gttggatatg 60
agctatgtca ccaccatgcc ccagatgttg gtgcatcttc ttgctcactc tcagaccatc 120
teetttgetg getgetgeet geagatgtat gtgtteggtg eeetgggtat gaetgagtge 180
accttetttg ttgtgatgge ttateacegg tatgtggeca tttgetagee attgeectat 240
actgtcatcc tcaactgggg cctgtgcatg cggttggcag cagggtcttg gatctgtggt 300
ttcttttcat ctttattaca tactttcttc accatgagtc tgccatattg tgggcccaac 360
agggtcaatc actacttgtg tgaaggtcct tcagtgcgta gcttggtttg catggatact 420
cactttgtag agatggtgga cttggtcttg agtgtctttt tggttgttat tccaatttcc 480
ctcattgtgg cctcctacat tcatattgcc atggcaattc tcaagatcaa gtccacagag 540
ggccgctgca agtctttctc tacctgtgct tccctcctga catggttaca ctcttctata 600
tttctgccac ttacaactac atgaggccca actccagcta ctctcctgaa tgagaaagca 660
gatctcactc ttttacaatg cttttacacc cttgctcaac cctgtggcct acagtctgag 720
aaacaagaat ataaagaggg catttctcaa agtgataagt tatagcaggt gggccggggg 780
                                                                   793
accaggatgg tga
<210> 1108
<211> 676
<212> DNA
<213> Mus musculus
<220>
<223> MOR203-7P
<400> 1108
atggaacaaa gtaatgacac caaagtgact gaattcattc ttctgggatt tgctgggcag 60
cacaagtett ggcacattet gttcataata tttctaatga tetatgttgt cacaeteatg 120
ggtaacattg gaatgatcgt actcatcaaa attgattctt ctctccacac tcccatgtac 180
tttttcctac aacatctagc ctttgttgat ctctgctata cctcagctat tactcccaag 240
atgttaaaaa acttcacaga gacaaaagct tccatatctt tcataggatg tatgttacag 300
ctactageet atggtaettt tgeaaceate gaetgtttea teetagetge tatggetgtg 360
gaccgctacg tggccatctg taacccattg cgctatccca tagtcatgtc ccaqagactg 420
tgcattctgc tgctggtggg ttcttatacc atgggcttcc taaatgcttc tgtaaacaca 480
agttttacat teteactgaa attetgeaaa teeaatgeea ttaateaett tttetgegat 540
gagccaccca ttcttgccct atcatgctcc agtattgact tcagtatcat gttactgaca 600
gtttttgtgg ggttcaacct agttgagtac tgtgctggtt gtcatctttt cttacatata 660
                                                                   676
tatcttgtct gccatc
<210> 1109
<211> 465
<212> DNA
<213> Mus musculus
```

```
<400> 1109
ctcatgctgt ttctcaagtt agatttttgt gcttcaaatg tcattgatca tttctgctgt 60
gactacttcc ccatcttaca gctctcctgc tcagatacat ggtttttaga gacaatcggc 120
ttttactttg catttattac tctgctgttc acactggctc tagtgatctt gtcatacatc 180
tgcatcatca acaccattct gaggttccca tctgccagtc agaggaaaaa ggctttctcc 240
acctgttcct ctcacatgat tgtcatctcc atctcttatg gcagctgcat tttcatgtat 300
gtcaaacctt ctgcaaatga aagagcatca ctgaccaaag gggtggctct tctcaatact 360
tcaattgctc ccatgctgaa cccttttatt tacaccttga gaaatcaaca agtaaaacaa 420
gccttcaagg atttgattaa taaactaatg tttaatagaa acaaa
                                                                   465
<210> 1110
<211> 658
<212> DNA
<213> Mus musculus
<220>
<223> MORO-16P
<400> 1110
gatttggcaa taggacaata ttgcatgttg catgagttca ttctgactga attatctaag 60
aagctagact ctcagctgcc tttttcctct acttttatag gaacttatgc actcactctg 120
gtgggaattt gggcaggttc acattgaatc agtaaagttt ccactgcaca aacccatgta 180
ctacttette ageaatatat acteeattaa tetetgeeat eecatggttg ttaacceaaa 240
aatgtttggg aaatttgtga tagaaaacaa ccccatctcc caccctcaat acatgactca 300
gctctatttc atcctcagtt ttgtgactgc aaaatgccac ttgttagcag caatttcata 360
tgaacctcat gttgctatat ataatccttt ggtttacaat gtgaccatat tctctcagat 420
ttacagttcc ttgatttcag aagtacatat tactggtgta gtttgtatat caggtcacac 480
aggcatcaag atctctgtat agcttggtaa cataggcgtg atcaaatacc atttctatgt 540
tcttacctga caaaactccc ccacttatgt taaagttctt gtttaatgat tttaactatt 600
attttattta ataatettte ateetattea tteaeteatt aagttaaagt tetttttt
<210> 1111
<211> 373
<212> DNA
<213> Mus musculus
<220>
<223> MOR185-9P
<400> 1111
atggctgaag gtaacagttc aacagtattt cagttcattc ttgaaggcct gacagatgac 60
ccagagettg aggtcaccet ctttgctgtg tttctagtca tctacttaac tactgtcttg 120
ggtaacctag gactgattat gctaatccaa gtcagccctc agcttcacac acccatgtac 180
tttttcctct gccacttggc attcgttgat tttctgttat acatcctcag tcactccaaa 240
cacaattata aactttcttc gagaaatcaa aagtataacc ttatatgcat gtgccactca 300
ggtttgctgt ttcatcacat ttgctgtttg tgaaatgtac ttgctgtcag taatggctta 360
tgacagatat gtg
                                                                   373
<210> 1112
<211> 952
<212> DNA
<213> Mus musculus
<220>
<223> MOR12-4
```

```
<400> 1112
atgaagaact acaatagete tttggggtte ttaccaacaa catteatttt ggttggeate 60
ccaggactgg agacagagca catctggata tccatcccct tctgcctgat gtacttcatc 120
atetteettg ggaatggeae cateetteat gteateagaa eagatgette aetgeateag 180
cccatgtate tttttettge catgetggea etggetgagg ttggtgtete tgeeteeact 240
ctaccaactg tgctaggtat cttccttttt gatacttcag agattacctt tgaagcctgt 300
cttctccaaa tgtttttcat ccattctttc tccattatgg agtcagctgt gttgctggcc 360
atgtctgtgg accgctttgt ggccatctac agcccactac gttatacaac tatcttgaca 420
ctgcctcgca tctttggcac aggagctgtc attggactga aaagtgttat actaatggcc 480
ccattgccta tactcttaag gagattgccc ttctgtggcc acaatgccct ttctcattcc 540
tattgtctcc accccaatct tatccatcta ccttgtgggg acatttctat tgacaatatc 600
tatggacttt tcattgtgac ctccactttt gggctagatt cattgctcat tgtggtgtcc 660
tatgggctta tactccatac tgtacttgga attgccactg gagatgggag gaggaaagca 720
ctcaacacat gtggctcaca tgtctgtgct gtgcttgctt attatgtacc aatgattggc 780
ttgtctatgg tacatcgctt tgcacatcat gtatctcctc tgcttcaaac catgatggcc 840
aatgettate tettetteee eecaagteat caaceccatt gtetacagea teaaaaccaa 900
ggagatccgt cgtggcattg ttcgaatgct gtcagagaag aggttcagag tt
<210> 1113
<211> 966
<212> DNA
<213> Mus musculus
<220>
<223> MOR18-3
<400> 1113
atgccacage cettggteec teteategee acceeaaatg gaagtttgge ceateeagee 60
tattttctac tggtaggcat ccctggccta ggatctaaaa tccacttttg gctggctttc 120
cccttatgct ttatgtatgc agtggccaca ctgggcaacc tggccatcat cttcatcatt 180
cqtqtqqaqa qqcqcttqca tqaqcccatq tacctcttcc tcqccatqct ttctaccatt 240
gacttggtcc tctcttctgt taccatgccc aaaatggcca gcttgttcct aactggcatt 300
caggagatcg agttcaacat ttgcttgacc caaatgttcc ttattcatgc cctatctgcc 360
atggagtetg etgteetget ggeeatgget tttgaceget ttgtggeeat ttgctaceeg 420
ttacgccatg cttctgtgct cacagggact actgtcgcca agattggcct agcttcccta 480
caaacacata ctgtcacaca ctccttctgt ctccatcaag acattatgaa gctgtcctgt 600
actgatacca aagttaatgt cgtttatggg ctcttcatca tcctatcagt catgggtgtg 660
gactecetet teattggett tteetatate eteateetga gggetgtgtt ggagetttea 720
actogagggg cagcactcaa ggctttcaac acctgcatct cccacctctg tgctgtcctg 780
gtcttctatg tacccctcat tgggctatca gtggtacata ggctgggtgg tcccacatct 840
ttggtccatg tgattatggc taatatctat ctcctgctac cacctgtagt caatcccatt 900
gtgtatggag caaagacgaa ggagatccgt tcaagggtta tccgtatgtt ttcacaagat 960
                                                                 966
ggcagg
<210> 1114
<211> 1041
<212> DNA
<213> Mus musculus
<220>
<223> MOR14-9
<400> 1114
atgtttttca gagtgtgtct tcaagtcacc atgctgatct tcaataatac cacatccccc 60
tectecteca getteeteet taeggeette eetggattag aacttgetea egtetggate 120
```

```
tocattoctg tttgtggtct ctacaccatt gcactcttag gaaacagtat tattttgttt 180
gtcattatca ttgaacggag tctccacaag cccatgtact attttctctc catgctgtct 240
gttgttgatc taggtctgac catcacaacc cttcccacag tccttggtgt cctttggttt 300
catgcccggg agatcagcat taaagtatgc ctcattcaaa tgttctttgt gcatggcttc 360
tcattcctgg agtcttcagt attggtggcc atggcttttg accgctactt ggccatctgc 420
agccctctqa agtatgctac tttcctqaca qacatqatqa gctttgtgat cqqactqatc 480
atctgtataa gacaggtggt tttcatgttt ccctcagtta tggctgtgaa gagtgtgtcc 540
ttccaaggag gccaagagct ttcccatcca ttttgcttcc atccagatat aatcaaattc 600
acatacacca acccctggat cagcagcttc tggggaatgt ttcttcagct ctacctgaac 660
ggcactgact tattgttcat tcttttctcc tacgtcctga tccttcgcac tgttctgaac 720
atogtggctc ctcaaaaaca gcagaaagct cttagcacat gtgtttgtca catctgtgct 780
gtgaccattt tctatgtgcc aatgatcacc ctgtctgtgg cacaccgtct cttcagttct 840
acteceaggg tgatetgtag tattttggge aatatgtate tgetettgee geetgtgetg 900
aatcctatca tttacagctt qaaqaccaag gttattcgcc aagccatatt ccagctgttc 960
cgattcaagg atgcaagggg ctacattatg aggagcctta gaggaaggtg ggctagaagg 1020
agacagtttt ccagtacatg a
<210> 1115
<211> 990
<212> DNA
<213> Mus musculus
<220>
<223> MOR14-10
<400> 1115
atgtcaacct tccagaacac cacagcttct tccatcattt tcctgctcac tggtgtgcct 60
gggctggaag cettccacac ctggatetec attecettet gettteteta tgcaactgec 120
ctgtcaggga acagcctgat tctctttgtc attatcaccc agcccagcct ccatgagccc 180
atgtgttatt teetetetat getgteeace aetgaeeteg ggeteteeat etecaetetg 240
gccaccatgc tggggatatt ctggttcaac gccagagaga tcagcttcaa tgcttgcttg 300
tcacaaatgt tctttattca actcttcact gtcatggaat cctcagtgct gttggctatg 360
gcttttgatc gttatgtggc catctccaac cctcttaggt atgcttcggt cttaactgac 420
cttaaaatag ctcagattgg agtagcaatt gttaccaggg gcacactgat actgactcct 480
atggttgtcc ttcttaaaag attatcctac tgtagcagcc atgtgcttca tcactcctac 540
tgtttccacc ctgatgtcat gaagctctca tgcacagaca ccaggatcaa cagtgcagtt 600
gggctcactg ccctgatctc cactgctgga gttgactctg tcttcatcat cctctcctat 660
gtcctgatca tcagaactgt cctcagcatt gcttccccag aagagaggaa gaaagccttc 720
agcacgtgta tctcccatat tggggctgtg gctgtgttct atattccact gattagtctg 780
tcctttgtcc acagatttgg gaaacgagct ccgccatatg tccatactct gattgccaat 840
gcctacctgc tgatccctcc tgtcatgaac cccatcatct acagtgtgaa gaccaagaag 900
atacggaagg ctgtgttgaa agttttccat tccagcatga caagagctag tttgttgttt 960
catcgttttt ctactttgtc attttatgaa
                                                                  990
<210> 1116
<211> 927
<212> DNA
<213> Mus musculus
<220>
<223> MOR250-5
<400> 1116
gtgttattga atcacacatt agtcactgaa tttctcctct tgggggtgac agacattcaa 60
gaattaaacc ctattetett tgtcaeggte ettgeeatgt attttgtcaa tgtggetggg 120
aatggagcca tootgatgat ogtoatttoa gatocaagac tooacttgoo tatgtattto 180
ttcctgggaa acctagcatg cctagatatc tgcttctcca ctgtaacagt gccaaagatg 240
```

```
ttagagaact tottototac aagcaaagca atttoottot tgggatgcat aactcagott 300
cattlettee actteetggg tageacagaa geeetgetge tgaeagteat ggeatttgae 360
cgctttgtgg ctatctgcag accactgcac taccctgcca ttatgaacag tcagatctqc 420
atcctggtgg ctatctccat ctgggccatt ccttttcttc atgctttagt tcactctata 480
ttgacgtctc aattgaactt ttgtggttcc aaccacatcc atcatttctt ctgtgatgtt 540
aagccattac tggagctggc ctgtggaaac actgagctca acaggtggct gctcaatact 600
ctcacaggga cagttgccat tggcctcttt tttctgacat ttctctctta tttctacatt 660
gtcacgtatc tctttctgaa gactcgttcc tgcagcatgc tgcacaaagc actgtccact 720
tgcgcctctc acttcatggt tgtcatgatt ttctatgctc ctgttctctt tatttatatc 780
aatcctgatt cagggagctc cctggaaaag gacaggatca ttgctgtcat gtacactgtg 840
gtcacccctg cactcaatcc acttatctat actctgagga acaaggaagt gagaggtgct 900
ctgaatagaa aaatcagaat attactt
                                                                  927
<210> 1117
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR32-11
<400> 1117
atgtetteta teaatageae eeagtteeat eeetetttet ttateetggt agggatteea 60
ggattggaaa tttttcatat atggattgct ttcccattct gtcttgtgta tctgacttcc 120
cttqtqqqaa acatcaccat tctctttqtq atcaaqactq aacataqcct tcaccaqccc 180
atgttctact ttctagccac attgtcgata attgatctgt gtctatccac atctactatc 240
cccaaaatgt taggcatctt ctggttcaat ctccgggaga tcagtttcgg gggctgcctt 300
gctcaaatgt tcttcatcca cgtgtttaca ggcatggaaa ctgttttgct agtggtcatg 360
gettatgace getttgttge catetgeaaa ceteteeagt acaccacaat ceteaceaat 420
aaaaccatca gccttcttct ctcagttgtt attggaagaa atttaattct cgtgactccg 480
tttgtgtttc tcattctaag actgcccttt tgtggtcacc acatcatgcc tcacacatac 540
tgtgagcaca tgggtctggc ccgattagct tgtgcaccca tcaagatcaa catcatctat 600
qqactcqtaq tqatttccca tatccttqtq qacatqatcc tqattqcctc ttcctatqtq 660
cttatccttc gagctgtttt ccgaattccc tctcaagatg cccgattgaa ggcgctaaac 720
acttgtggtt cccatgtctg tataatgctg tgtttttaca caccagctct gttttctttc 780
atgactcacc gctttggcca aaacattccc cactacatcc acattctttt agctaatctg 840
tatgtagtca ttccacctgc tctgaaccct gtcatttatg gagtcagaac taagcagata 900
agagagaaaa ttataaaaat agttgtacaa aaagaa
                                                                  936
<210> 1118
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR271-1
<400> 1118
atggagaaat ggaatcagag ttcaagtgat ttcattctct tagggttgct tccacaaaac 60
caaactggcc tactacttat gatgctcatc atacttgtct tctttctggc cttgtttgga 120
aactcagcaa tgatccacct cattcgtgtg gatccaaggc tccacacccc catgtacttt 180
ctcctcagtc agetetetet catggacetg atgtacattt ctaccactgt teccaagatg 240
qcatttaact tcctttctqq ccaqaaaaac atctcttttc tqqqctqtqq tqtqcaqtct 300
tttttctttt tgaccatggc aggttctgag ggcttgctct tggcttccat ggcttatgat 360
cqttttqtqq ctatctqcca tccccttcac tatcccattc gcatgagcaa gataatgtgt 420
ctgaagatga tcataggatc ctggatattg ggctcaatca actctttagc acattccatc 480
tatgcccttc atattcctta ctgccattct aggtccatta accatttctt ctgtgatgtt 540
```

```
ccagccatgt tgcccctggc ctgtatggac acttgggttt atgagtacat ggtgtttgtg 600
agcacaagcc tgtttctcct actgcctttc cttggtatca cagcttccta tggtaggqtc 660
ctttttgctg tcttccacat gcgctcaaaa gagggaaaga agaaggcctt caccacatqc 720
teaacteact taactgtggt gacattttae tatgcacett ttgtctatae etatettega 780
cctaggagtc ttcgctcccc aacagaagat aagattctga ctgttttcta cactatcctt 840
acccccatgc tcaaccccat catctatagt ctgaggaata aggaggtcct gggggccatg 900
acaagagtcc ttgggacatt ctcttccatg aaacca
<210> 1119
<211> 963
<212> DNA
<213> Mus musculus
<220>
<223> MOR101-2
<400> 1119
atggaaaaca tagcctgtaa tgggtcaggg aactctcaga ccagcttcta ccttacaggc 60
atcccctctc tacaaaaatc gctcttcctt cccgtcttcc tcatctttct cctcctctac 120
ctgctcatcc tggtggggaa cgccctgatc ctggtggctg tggtggccga gcgcagcctc 180
cacaageeca tgtaettett cetaateaae eteteggete tagaeateet etteaecaea 240
accactgtcc cgaagatgct gtccctgctc ctgctgggag accgcttcct cagtttccct 300
geetgettee tgeagatgta tetgtteeae agttteteet geteagaage etteateetg 360
gtggtcatgg cctatgaccg ctatgtggct atctgccgcc ctctgcacta ccccgtccac 420
atgaccccac agacaaacac tgcactggca gccagtgcct ggatcaccgc cctcctcctg 480
eccateceag cagtgataca gaetteecag atggegtttg acaacattge etacatetae 540
cactgcttct gtgaccacct ggccgtggtc caggcctcct gctcagacac cactccccag 600
acactcatgg gcttctgcat tgccatggtg gtgtccttcc tccccctcct cctggtgctc 660
ctctcctatg cccgcatcct gtcctcagta cttcggatca actccaagga agggcgttcc 720
aaageettet eeacetgeag tteecacete etggtggtgg geacetacta etegteeatt 780
gccatagect atgtggetta cegagetgae etecetgtag aettecaeat catggggaat 840
gtagtctatg caattctcac ccctgttctc aaccctctca tctacaccct gaggaacaaa 900
gatgtcaagt cggccatcac taaaatgatg tgtcaccagg atccaaagag tattggaaag 960
CCC
                                                                   963
<210> 1120
<211> 987
<212> DNA
<213> Mus musculus
<220>
<223> MOR36-1
<400> 1120
atgagaccca aacttcatcc ttacagaatg gcagaaagtt cgcagtccaa ttctaccttc 60
caacacccag ctttctttat attgactggc atcccagcat tgggagatgg ccaggcctgg 120
ctgtccctag tgtttgggct catgtatctg ctggccctac taggcaatgc aacactcctg 180
acagtaatcc gaatagactc tacattgcac caacccatgt ttctactcct ggccactctg 240
gcagctactg acctgggctt agccacatct atagccccag agttgctggc tgtgctgtqq 300
cttggacccc aacctgtaca atacactgcc tgcctaatcc agatgttctt tgtccatgca 360
ctgactgcta tggaatctgg tgtgcttttg gccatggcct gtgatcgggc tgtqqcaqtg 420
gggcgtccac tacactaccc tatcttggta actaaagccc gtgtgggcta tgcagtcctg 480
gcactgacac tgaaagtcct ggctgttata gtgcctttcc ctctgctggt agtacgattt 540
aagcactttc atgccaagat catacaccat gcctattgtg cacacatggc agttgtagag 600
ctggtagttg gtaacacatg ggtcaacaac atgtatgggc tagcactttc actggctgtg 660
tctggtgtag atattctggg cattgctgga tcttatgggc tcattgccca tgcagtactt 720
eggetaceta eccaggagge eegagtaaag geetttggta eatgtagtte teacatetgt 780
```

```
gtcatcctgg cettetatgt geetggtete tteteettee teacceateg etttggtegt 840
cacactgtcc caaagccagt gcatatcctt ctgtccatca tctatttgct gctgccacct 900
gccctcaacc ccctcatcta tggggtccgc accaagcaga ttagggaccg attcttagaa 960
                                                                  987
atgttcaaat tcagaaaaaa gcagttt
<210> 1121
<211> 966
<212> DNA
<213> Mus musculus
<220>
<223> MOR42-2
<400> 1121
atgggtgagg atggaaatac cagtatette aacettteet acageagett cetettggtg 60
ggcttccctg gattgcagga agggcgaccc cttctggtcc tgcctcttac ctttctctat 120
gtgtccatcg tttctgccaa tgccttagtc attcatacag tggtggccca gaggagtctg 180
caccagecea tgtacgtget cattgetetg etettggetg teaacatetg tgeeteeaca 240
gccgtgatgc ctaaaatgct tgaaggcttt gtgcattatg caaatcccat ctcactccgc 300
ggctgcctca cacaaatgtt cttcatctac tttacgctcc ttctggacta caatctcctg 360
ctggccatgg ctctagatcg ctatgtggcc atttgccacc cactccgcta tactgacctg 420
atgaceteae aettaetggg eetgatggee aettttgega taaegeggag eetaggagtg 480
gcagtgcccc tagtggtact aactgcaaaa gctcaattct gcaagacatc tgtcataaga 540
cacttcacct gegagtacat egeattgttg ageategett gtggagacet gacettcaac 600
aaccgcttgg gattagctat gcgtttggtc actgtgactt ttgatctggc cttattggga 660
acctectata eccgtateat etatgeagee tteeggatet ettetggggg agecegagee 720
aaggeettge acaettgtgg etcecaetta etggteatee teaceateta eetttetggt 780
ctttccactt ccattgtctt tcgagtggcc aagactgtgt ctcaagatgt ccagaaccta 840
ctcagtqcca tatacctqct qctcccagqa qccttqaatc ctctcattta tgqggtqaqa 900
actaaqqaqa tccqqcaaca cataqaqaaa atqctctqtq qaatqcaqtc accccaaqac 960
agcaga
                                                                  966
<210> 1122
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR12-5
<400> 1122
atgttcaaca gcagtcaatt caccccaaaa tacttcctgc tgaccggttt ccctggtctg 60
gaagcatggt accettgget gatetteeca ttetgtttea catatactat aggeateatg 120
ggcaataccc tcattctggc tgtgatcaga aaaaacagtt ctctgcacca gccgatgttc 180
ttgttcctgg ccatgctggc cttctccgag cttggtgtct ctgcttcgac cctgcccact 240
gtgctcagca tctttctgct cggtgccaat aaaatctgct ttgaagcctg ccttttgcag 300
atgttctcca tacattcatt ttccatcatg gagtcaggag ttcttctagc catgtctgtg 360
gategetttg tegecateta caacceacte egatacaceg ceatectgae tetgeceege 420
attgctggta ccagtcttac acttggattg aagagtctgt tgctcatgtt ccccttgcct 480
tttctcctaa agegtctgcc tttctgtggt cacaatgtgc tttcccattc ctactgtctg 540
cactcagatc taatccaact tccctgtggg gacactcgtc ccaacagcat tctggggctc 600
tgcatcgtaa cttccacttt tgggctggac tctctgctca ttgttgtctc ttatgtgttg 660
atcctgtaca cggtactaaa cattacctct ggggaggggc ggaggaaagc tctcaatacc 720
tgtgtgtcac atatgtgtgc agttcttgtg tactatgtgc ctatgatcag cgtggctctg 780
gtgcatcgat tcatgaagca tgctgtacct gctgttcgcc ttctcctggc caacatctat 840
cttctggtac caccgatgct caatcccatc atctacagtg ctaagaacag gcagattcgc 900
caggggttaa tacaactctt tcttcaaaga aaatat
                                                                   936
```

```
<210> 1123
<211> 963
<212> DNA
<213> Mus musculus
<220>
<223> MOR40-11
<400> 1123
ctggatacta agcgtgcaac taacagctca gagttccaag tctctgagtt cattctgctg 60
ggattcccag gcattcatga attccagatc tggctgtcct tgcctatggc tctgctttac 120
attgtagete ttggtgetaa teteettate ttgateacea tetacettga geetaceetg 180
catcagccaa tqtatcagtt tcttgggatc ttggctgcag tagatattgg cttggctacc 240
accagcatge ecaaaatact ggecatettg tggtttgatg ecaagaeeat eageeteeet 300
qaqtqttttq ctcaqatcta tqctatccac acttttatqt qcatqqaqtc aggcqtcttc 360
ctatgcatgg caatagatag atatgtagcc atttgttatc ccctccaata tccttccata 420
gtcactgaag cttttgtaat caaggccaca ctgtccatgc tgctcaggaa tggcctgtta 480
accateceag tgcctgtact agetgeecag agacaatact geteeaggaa tgaaatagat 540
cactgccttt gctctaactt gggggtcatt agtctggcct gtgatgatat cactgttaac 600
agattctacc agttggcatt ggcctggctt gtggtaggaa gtgacatgat tctggtctat 660
gettettaeg etttgattat tegeteagtg etgaggetga aetecaetga ggeageatet 720
aaggeeetea geacetgeag eteceaeete ateeteatta tgttttaeta eacagetatt 780
gttatagtat ctgttactca cctagcagga agaagggttc ccctcatccc tgttctcctc 840
aatgtgatgc atattgtcat coctocatco ottaaccoca tggtatatgc cottaggaca 900
caggagetga aggtgggett ceggaaggtt tttgagteat tatgtgteea gaaagtaaac 960
                                                                  963
tga
<210> 1124
<211> 966
<212> DNA
<213> Mus musculus
<220>
<223> MOR286-1
<400> 1124
aacaggtccc agacagcaga cccgaagaac agcagcactg tgactgagtt catcctcgtg 60
ggctttgagc agageteece ttecacaegg geattgetet teaceetett eetggetete 120
tacagoctcg ccatggccat gaatggcctc atcatcttca tcacatggac tgaccccagg 180
ctcaacagcc ccatgtactt cttccttgga cacctgtctt tcctggacgt ctgcttcatc 240
accaccacca tecegeagat gttggteeat etggtgacca agaaccacae tgteteettt 300
gtctcttgca tgacccagat gtacttggtc tttctagtgg gtgtagccga gtgcatcctc 360
ttggctttca tggcctatga tcgttatgtt gccatctgcc acccactgaa ctatgcccag 420
atcatgagcc agaaggtgtg tgtcaggctg gtgtgttctt cctggatctt tgggatggtc 480
aatggtatct ttcttgagta tatatcattc aggaatccct tctgcaaaga caaccacata 540
gagaacttct tctgtgaggc tcccatagtg atcgctctct cctgcgggga cctcaagttc 600
accatgaagt tgatctttgt ggatgccatt gtggtgttgc tcagtcccat ggtgctcatc 660
atcacetect atgeoegeat cetggeetee atceteegea gggeeteete etcaggtagg 720
gggaagacat totocacatg tgcotocoac otgacogtgg ttgtottttt otacacotoa 780
gccatgtttt cttacatgaa tccccgcagt acacatgggc ctgacaaaga caagcctttc 840
teteteetet acaccattat cacceccatg tgeaaccegg teatetacag etteegeaac 900
aaggaaatga agggggctat ggggcgggct cttgggatag gtagcctggc tcaggcagag 960
                                                                   966
tctgtc
<210> 1125
```

<210> 1125

```
<212> DNA
<213> Mus musculus
<220>
<223> MOR286-2
<400> 1125
agaccccaaa agggagactc gaggaacagc agtagcactg tgactgagtt catcctcgtg 60
ggetttgage agageteece ttecacaegg geattgetet teaceetett eetggetete 120
tacageeteg ceatggeeat gaatggeete ateatettea teacatggae tgaceecagg 180
ctcaacagcc ccatgtactt cttccttgga cacctgtctt tcctggacgt ctgcttcatc 240
accaccacca teccacagat gttggteeat etggtgacca agaaccacae tgteteettt 300
gcctcctgtt tgactcagat gtatctggtt tttggtgtgg gtgtggccga gtgcatcctc 360
ttggctttca tggcctatga tcgttatgtt gccatctgcc acccactgaa ctatgcccag 420
atcatgagec agaaggtgtg tgtcaggetg gtgtgttett eetggatett tgggatggte 480
aatggtatcc ttcttgatta catgacattc cgaggtccgt tctgcagaga aaaccacata 540
gagaacttet tetgtgagge teccatagtg ategetetet cetgtgggga ceetgagtte 600
agtctqaaqq tqatctttat qqatqccatt qtqqtqttqc tcaqtcccat qqtqctcatt 660
gtcacttect atgecegeat tetggettee atecteegea gggeeteete egeaggtagg 720
gggaagacat totocacatg tgcctcccac etgacegtgg ttgtcttttt etatacetca 780
gccatgttct cttacatgaa tccccgaagt acacacgggc ctgacaaaga caagcctttc 840
teteteetet acaccateat cacceccatg tgcaaccegg teatetacag etteegeaac 900
aaggaaatga agggggccat gggggggct cttgggagag gcagcctggc tcaggcagag 960
tctgtc
                                                                  966
<210> 1126
<211> 924
<212> DNA
<213> Mus musculus
<220>
<223> MOR160-3
<400> 1126
atgaggaact teagtqteqt etetqaqtte atecteettq qtetqtetqa tqatqeacaq 60
gtccaggetc tactetttgt ggettteett gtgatetatg teetgaeeet gaeagggaae 120
tocatgatto tgttggtgat aagggtggat gctcacctcc gctctcccat gtactttttt 180
ctgggtcacc tctccttcct ggatcttttg tattcgtcag tctccacacc caagatgctg 240
gagaatctgg tgtctgagac aaaaaccatc cctgtgaagg gttgcctggc ccaagccttc 300
tttgtgtttg ccattggggg tactgaggct ttgcttcttg ctgtcatggc ctatgaccgc 360
tatgcagcca tttgccaccc tctactctat ggtcagatga tgaacgactg gttctgccag 420
gtgctagtgt ggggatcctg gatcctggcc atcctgaact cactcattaa taccctccta 480
gctqtqaqtt tqqacttttq tcactatqqa accatacaca actacaactq tqaqtttccc 540
tecetettee eteteteetg eteegatgte tecaetaatg ceaetgeeat agtetgtagt 600
tttgtcatac acgcctctgg aaccttcctt ctcgtggtag gttcttatgg ctgcattttc 660
tocactator tgaacatgag ctccaccagg ggtaggagca aggratttte cacctgeter 720
teccaectea eegtagtgat gttgtaettt ggtteggeet geetgegeta egteatgeee 780
acctcaggtt ctccagtgga aatgtacttc tctgtgcagt acagcgtcat cacccccatg 840
ctgaatccct ttatctacag tctgaagaac caggaggtga aggcggccat gagaaagctg 900
                                                                  924
ctggcaagat gctaccagca tttt
<210> 1127
<211> 948
<212> DNA
<213> Mus musculus
```

```
<400> 1127
atggagetet ggaacteeae ettggaaagt ggetteatet tggtqqqqat tetgaatqqe 60
agtagetete etgaattget etgtgeeata gteacageet tgtacatgtt ggeactgate 120
agcaatggac tgctactcct tgtcatcaca gtggatgccc ggctccatgt acccatgtac 180
ctcctactga ggcagctgtc tctcattgac ctcctcttca catcagttgt cacccccaag 240
getgteatgg attttetttt gagagaeaac aetatateet ttggaggetg tgeeetteag 300
atggetetag cattgatget aggeagtgea gaggacetee ttetggeett catggeetat 360
gacaggtatg tggccatttg tcatcctctc aattacatgg tcttcatgag tcctacggta 420
tgctggttga tagtgtctac atcatggatc ctggcatctc ttactgcagt aggtcatact 480
gtgtacacaa tgcacttccc tttctgtatg tcccaggaaa ttagacacct qctctgtgag 540
atcctqcctt tgctgaagct gtcctgtgta gatacctccc aatatgagct catggtttat 600
gtgacagggg tgacattcct cttactcccc ctttctgcca ttgttacctc ctacacacta 660
attetgteca etgtgetgea catgeettea aatgaaggga aaaagaaage eettgteace 720
tgtctttccc acttgatggt ggttggaatg ttctatggag ctgccacttt catgtatgtc 780
ctacccagtt cattgcacag tgcaaaacaa gacaatataa tctctgtgtt ttacacaatt 840
qtcaccccaq ctctgaaccc ccttatctat agcctgagga ataaggaagt tattggagct 900
ttgagaaggg tcttgggcag atacatcctg ccagcacacc ttactctt
<210> 1128
<211> 951
<212> DNA
<213> Mus musculus
<220>
<223> MOR103-16
<400> 1128
atggaaaaca tcaccaacat cagtgagttc atcctcatgg gcttccctac tgctccatgg 60
ctgcaaattc tgcttttctc catcttcttc ataacttatg tgtttgtgct tttggaaaat 120
ctggtcatca ttcttactgt atgggtcact gggtcactgc acaagcctat gtactatttt 180
ctgagtacta tgtcctttct ggaggcctgg tatatatctg tcactgtccc taagatgctg 240
gctggattcc tatttcgccc caataccatt tctttcttgg gatgtatgac tcagctttac 300
ttctttatgt cccttgcctg tactgaatgc gtacttttag ctgccatggc ctatgatcgt 360
tatgtagcca tatgttggcc tcttcgctat ccagtcatga tgaccacagg attttgtgtt 420
caactgacca tcagttcttg ggtgagtggc ttcaccatct ccatggcaaa ggtgtacttt 480
atctcacgag ttgccttctg tggcaataat gtcttgaacc attttttctg tgatgtgtca 540
cccatcctta agttagcctg tatgaactta tctatggctg agacagtaga ttttgccctt 600
gccatcgtca tccttatatt cccactctca gccactgttc tttcctatgg cttcattgtc 660
tetactgtcc tgcaaatacc atcagccact gggcagcgga aggccttctc cacctgtgct 720
teteatetta eagtggtggt catettetae acagetgtga tetteatgta tgteegaeet 780
cgggccattg cttcgtttaa ttctaacaag ctgatctcag ccatctatgc agtcttcact 840
cccatgctca accccattat ctactgcctg aggaacaagg aagtcaaaga tgccatcaga 900
aaaaccatag caggtggtag agcaccggcc ttgggagagt ctatttctta a
                                                                  951
<210> 1129
<211> 939
<212> DNA
<213> Mus musculus
<220>
<223> MOR176-2
<400> 1129
atgcagtttg aaaactttac cactgttttt actgaatttg tcttgttagg actttctggc 60
aggcaggatg tgcaacaggg cctctttgca ttgttcttcc ttgtttatgg cataactgta 120
```

```
attgctaatc tagggatgat cctqctqatc aagttggaca gcaggcttca cacacctatg 180
tactatttcc tgagcaatct gtccttctgt gacatctgct attccaccat tatctctcca 240
aagatgctgg ctgatttctt qtctaaagag aagaggattc cttataattt atgtqctatt 300
caactgtatt ttttcggggc ctttgcagat gtagaatgtc tcatgctagc tgtcatggcc 360
tatgatcgtt atgttgccat ctgcaatccc ctgctctata caattaaaat gtccaagaag 420
ctctgcatcc agcttgtggc tgttgcctat gcaataggct tggtggattc aacaatccac 480
acatectgtg catteagatt gteettetge aatteaaatg teateaacea etttttttgt 540
gaccttccac ccttgctggc cctctcctgc tcagatacat ccatcaatga aatagtgatg 600
ttcacattaa ttggctgtgt ggtagggtgt agcattgtca cagtccttct ctcctactgc 660
tacatcattg caaccatctg caggatgaac tctgctgaag gcaggcacaa agcattttcc 720
acctgtqctt cccacctcat qqctttqqcc attttttatq qaactctqct tttcatqtat 780
ttccgaccca gctcaagtta ctccatggac acagacaaaa tggcctctgt tttctacaca 840
gttgtgattc ctatgttaaa cccactcatc tacagtttga gaaataagga tgtgaagggg 900
gctctgaaga aggcaatcaa tattaacttg tggcctggg
<210> 1130
<211> 969
<212> DNA
<213> Mus musculus
<220>
<223> MOR264-17
<400> 1130
atgttttatt tactgtctgt agatgaagag aaaattaaag cagaaaaatc gaatgcctct 60
tegetgattg aatttateet acttggtttt tetgatgtee eeaateteea atggattetg 120
tttgggattt ttttgatcat gtatttgact attctgatgt gcaacagtac tatagtgctc 180
ataacaagaa ctgaccctgc tctgcagacc cctatgtatt tttttcttag caacttttct 240
tttgtggaga tatgttatgt aacagtcaca attccaagga tgcttgtgga cctgtgtact 300
cagaaaggaa atatetetat aettgeetgt gecaeteaaa tgtgttttat eettatgett 360
ggaggcacag agtgcctcct cctgacagca atggcctatg accgttacgt ggccatttgt 420
aatcctctac actattcttt agtcatgaac cacaggatct gtacacagtt agtggcagcc 480
tgctggatca gtgtcatacc agttgtaatt ggacaaacat accagatttt ctctctgcct 540
ttttgtggct ctaacagaat taatcacttc atttgtgata tcccaccagt actcaaactt 600
gcttqtqqtq acacatttqt qaatqaaata qcaqtctacq taqttqcqat qqtatttqtc 660
atggttccct ttatgctgat cattttctcc tattgcaaaa ttatctgcag tattctgaaa 720
ctgtcatcag ccaaaggaag gaccaaagct ttctccacct gctcctctca cctcatagtt 780
gtagtettat tetatggaac agetagtate acataettae aacceaagee aaateaatea 840
qaaataactq qaaaactqtt qtctcttttt tacactattt tqataccaac tctqaatccc 900
attatataca etetgaggaa taaggacate atggetgete tgagaaaact agttagtaag 960
                                                                  969
atactagtg
<210> 1131
<211> 933
<212> DNA
<213> Mus musculus
<220>
<223> MOR176-3
<400> 1131
atgacatttg agatcatcac tgtttttact gattttgtct tgttaggact ttctggcagg 60
caggatgtgc aacagggcct ctttgcattg ttcttccttg tttatggcat aactgtaatt 120
gctaatctag ggatgatcct gctgatcaag ttggacagca ggcttcacac acctatgtac 180
tatttcctga gcaatctctc cttttgtgac atctgctatt ccaccattat ctctccaaag 240
atgctggctg atttcttgtt gaaagaaaag aggattcctt gcaatttatg tgctcttcag 300
atgtactttt taggggtctt tggagataca gaatgtctca tcctagctgt catggcctat 360
```

```
gattgttatg ttgccatctg caatcccctg ctctatacaa ctacaatgtc cacgaagctc 420
tacatccage ttgtggetgt tgcctatgca gtaggettgg tggattcage agtccacaca 480
tectgtacat tecaactgte ettetgeaat teaaatgtea teaaceaett tteetgtgae 540
cttccaccct tgctggccct ctcctgctca gatacatcca tcaatgaaat actgctcttt 600
atatttagta cactegtgat agggtgtage attttecaea teettetete etaetgetae 660
atcattgtga ccatctgcag gatgaactct gctgagggca ggcgcaaagc attttccacc 720
tgtgcctccc atctcatggc tgtggccatt tttcatggaa ctcttttcat gtatttccaa 780
cccagctcac tttactccat ggacacagac aaaatggcct ctgttttcta cacagttgtg 840
attoctatgt taaatccact catctacagt ttgagaaata aggatgtgaa gggggctctg 900
aagaaggtaa tcaatattaa cttgtggcct ggg
                                                                  933
<210> 1132
<211> 942
<212> DNA
<213> Mus musculus
<220>
<223> MOR264-18
<400> 1132
atgaaacaca ctgacatcag ggaagaggac aacgcttcca cagtgacaca gtttcttctg 60
cttggatttt ctgaccttcc aaacctccag agctttctgt ttggggtgtt ctccataatg 120
tacttgatta tgctaattgc aaatagcttc ataattgtga taaccaagct tgaccctaca 180
ctacaqaaqc ccatqtattt tttcctggtc aacttttctt ttctggaaat ctgttatgta 240
tcagtcattc tccctagggt tctgtacagc atttggaccc aagacagaaa tatttctctt 300
ttggcctgtg ccacacaaat gtgcttcttc ctaatgttgg cagccactga aagtattttt 360
ctggctgtga tgtcctatga ccgctatgtg gccatctgta gtcctctgca ctatcctctg 420
gtcatgagtc caagaaaatg caggcagctg gcagcagggt cctggctcgg tggcatgccg 480
tttcaggttg ggcaaacctg tcaaatattc tctctacatt tctgtaactc taaccaaata 540
gaacacttet tetqtqacat acceetqtq ettaaactqq eetqtqqaqa caettetqtt 600
attgagatgt atgtctatgt agtggctatc ctgcttgcag caatcccttt tatactaata 660
ctaacatett acagcaaaat cattgccacc atcctgagge tgccaactge tgaaggacga 720
tcgaaagcct tcttcacatg ttcttcccac ctagtggtgg tggttttgtt ttttgcccct 780
gcatctatta cctacttaat gccaaaatca tctcattctg cagtaagtga caaattcctt 840
tetettttet acaccateat cacceegtg tteaateeca tgatatacag cettaggaac 900
aaagaggtaa ttgcagctct gagaagattg ttgcttacaa ca
                                                                  942
<210> 1133
<211> 931
<212> DNA
<213> Mus musculus
<220>
<223> MOR135-25
<400> 1133
atgaacaata aaactgtctt ctcccagttc cttctcctgg gcctgcccat cccccccaga 60
gcaccagcac ctgttctatg ccctgttcct ggccatgtac ctcaccaccg tcctggggaa 120
cctcatcatc atcaacctca taatactgga ctcccatctc cacacaccca tgtacttgtt 180
tctcagcaac ttgtccttct ctgatctctg tttttcctct gtcacaatgc ccaagttgct 240
gcagaacatg caaagccagg acacatccat cacctatgta ggttgtctga cacaaatgta 300
ctttttgtta gtttttggag acctggagag ctttcttctt ttggtcatgg cctatgatcg 360
ctatgtagcc atctgcttcc ctctgcatta caccagcatc atgagtctca agctctgtgt 420
atatotggtg otgatgtoot gggtatttaa ottgotgtat tooatgttgo actototact 480
cttagctaga ttgtcattct gtgaagacaa tgtgatccgc cactttttct gtgacatacc 540
tgccctgctc aagttgacct gttctgacat tcatattaat gaattaatga tattagtctt 600
aggaggactc actatggtca teccattett acttattgtt gtgtettatg tacaaattgt 660
```

```
ctcctccatt ctaaatattt cttctgctag ggttatacaa aagattttct ccacctgtgg 720
atcccaccta tctqtqqtct cactqttcta tggaacaatt tttggtctct acttatgtcc 780
atcagctaat aactctactg tgaaggagat tgtcatggcc atgatgtgca cagtggtgac 840
tectatgttg aacceettea tetacagaet gaggaacaga aacatgaaag aggeeetgat 900
aagagtoott ttoaagaaga aaatotottt g
<210> 1134
<211> 940
<212> DNA
<213> Mus musculus
<220>
<223> MOR185-10
<400> 1134
atggctaaca gcaatcactc tgcagtgtct gagttcatcc ttgtggggct cacagatgac 60
tcagagcttc aggtcagtct cttcggtgtg tttcttgtca tctacctaac tagtgttgtg 120
ggtaatgttg gattgattgt gttaattcaa gtgagtcctc agcttcatac ccccatgtat 180
tttttcctaa cccacctggc ttttattgac ttttgtttta cctcttctgt cactccaaac 240
actotogotoa attitotaco toa ago ata accominato totaco actoria del totaco actoria del totaco actoria actorio actoria del totaco a
ttgtgctgct ttgtcacatt tgtagtttgt gaactgtact tgctgtcaat catggcctat 360
gacaggtatg tggccatctg gaatcccctc ctctatgcgg tccgcatgcc tagggagctc 420
tgtcttcagg tcatcgccag cacatacatt tatggattca ctgtggggct tgcacaggca 480
gtggcaactt teegettgte tttetgtgge teeaatgtga teaaceactt etaetgtgat 540
gatgtcccct tagttgctct ggcctgttct gacactcacg tcaaagagct gatgttqcta 600
atcattgctg gcttcaacac tctttgctct ctggtgattg tggttatttc ttatatctgc 660
attetetttq ccatectqaq qatteattet getqaaggaa gaaggaaage ettttecaet 720
tgtgcatccc acctgacttc catcaccata ttttatggaa cagtaagttt tatgtacttq 780
cagcccaagt caagtcattc tctgaacaca gataaatttg cttcctgtgt tttatgtggt 840
aqtaattccc atqttaaacc cactqatcta caqcttqaqa aatcaqqaaq taaaqaqtqc 900
tctgaagaga attgtagaaa agttatcttc agccatcaag
<210> 1135
<211> 933
<212> DNA
<213> Mus musculus
<220>
<223> MOR135-26
<400> 1135
atgectggaa acaaccagae tatcatetet cagttettae teetgggeet geceattgee 60
cctqaqtacq agcacttgtt ctatgccctg ttcctggcca tgtacctcac caccgtcctg 120
gggaacctca tcatcatcat cctcataata ctggactccc atctccacac acccatgtac 180
ttgtttctca gcaacttgtc cttctctgat ctctgctttt cctctgtcac tatgcccaag 240
ttgctgcaga acatgcagag ccaggacaca tccatcccct atgcaggatg tctgacacaa 300
gtgtactttt ttctgttttt tgcagccctt gagaacttcc tacttgtggc catggcctat 360
gaccgctatg tggccatctg cttccccctt cattatgcca gtatcatgag ccccaagctc 420
tgtgtgagtc ttgtgctgct gatctgggtg ctgaccacat tgtatgccat gttgcacact 480
ttgcttttaa ctaggttgtc tttctgtgaa aacaatgtga tcccccactt tttctgtgat 540
ctgtctgctc tcctgaagct ggcctgctct gatattcaca ttaatgagtt ggtgatattg 600
atcataggag ggcttgttgt cctacttcca tttctactca tcattgtgtc ttatgcacgc 660
atcatctcct ccatcctcaa ggtcccttca actcgaggca tccacaagct cttctccact 720
tgtggttctc acctgtctgt ggtatcactg ttctatggga caattattgg catctactta 780
ggtccatctg ctaataactc tactctaaaa gacattgtca tgtctatgat gtacacagtg 840
qtqactccaa tqttqaaccc ttttatctat aqcctqaqqa acaqaqacat aaagggagct 900
ctaaaaaaag tgtttcaaaa gaaatctctc cta
                                                                                                                    933
```

```
<210> 1136
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR135-27
<400> 1136
atgectggaa agaaccaaac tgtcatctcc cggttcatcc tcctgggcct gcccatacca 60
ccagagcacc agcacctqtt ctatgccctq ttcctqqcca tqtacctcac cactqtcctq 120
gggaacctcg tcatcattgt cctcattcat ctggactccc atctccacac acccatgtac 180
ttgtttctca gcaacttgtc cttcactgac ctctgctttt ctactgtcac aatgcccaat 240
ttcctgcaaa acatgcagag ccaagtatca tccattccct atgcaggctg ccttgcacaa 300
atgtacttct ttttgttttt tggtgatgtt gagagtttac tccttgttgc catggcctat 360
qaccqttatq tqqccatctq cttccctctt cattatacca qaatcatqaq cccaaacctc 420
tgtgtgagta tggtgctgct gtcctgggca ctgacaacat tgtatgccat gttgcacact 480
ttgctcttaa ctaggttgtc tttctgtaaa aacaatgtga tcccccattt tttctgtgac 540
ctttctqctc tcctqaaqct qqcctqctct qatattcaca ttaatqaqtt aatqataatq 600
ataattggag cacttgttgt tatacttcca tttctactca tcatagtgtc ttatgcgcac 660
attgtctcct ccattctcaa agtcccttca actcgaggca tccacaaggt cttctccact 720
tgtggttctc atctgtctgt ggtgtcactg ttctatgggt cagtcattgt tctgtactta 780
tgtccatcat ctaataactc tactgtgaag gatactgtca tgtctatgat gtacactgtg 840
qtgactccca tgctgaaccc cttcatctac agccttagga acagagacat gaaggaagct 900
ctaaaaagag tgcttcaaaa gaaaataaaa ctctct
                                                                   936
<210> 1137
<211> 948
<212> DNA
<213> Mus musculus
<220>
<223> MOR135-28
<400> 1137
atggaaagag gaaatcaaac tgttgtttca gaattcctcc tcctgggctt gcctattgaa 60
ccacaccage aagacetttt ctatgeeetg tteetgteea tgtaceteae caetgeeetg 120
gggaacctca tcatcatcat cctcattcac ctggactccc atctccacac acccatgtac 180
ttqtttctca qtaacctqtc cttctctqac ttctqctttt cctctqtqac cattcccaaa 240
ttgctgcaga acatgcaaag ccaagttcca tccataccct atgcaggttg cctggcacaa 300
atgtactttt teetgetttt tgeagatete gagagettee teettgtgge catggeetat 360
gategetatg tggccatetg ettececeta caetataeta geateatgag ecceaagetg 420
tgtctctgcc tggtggcact atcttggcta ctgaccacag tcatctcttt gtcacacaca 480
ctgctcatgg ctcggctctc cttctgtgct aacaatgtga ttcctcactt tttctgtgat 540
atgtcagctc ttctgaagtt agcctgctct gacattcaga tcaataagtt gatgatattt 600
atcttgggag gacttgtcat tattgtccca ttcctgctga tattttcatc ctatgcacga 660
atagtgteet ecatteteaa ggteeectet tetagaagea teegeaagge etteteeace 720
tgtggttccc acctctctgt ggtgtctctt ttctatggga caatcattgg tctctattta 780
tgtccatcag ctaataattc aaccattaag gagactgtca tggctgtgat gtacacagtg 840
gtgaccccta tgctgaaccc ctttatctac agcttcagga atcaggatat aaagggagct 900
tttaaaaagg tgttttcaaa gcagatggct aacttttctc tgagatag
                                                                   948
<210> 1138
<211> 960
<212> DNA
<213> Mus musculus
```

```
<220>
<223> MOR266-8
<400> 1138
atgttgactg gaaaacttgt ccttaaccaa tctgggactc ctgagttcgt gttccgtgtc 60
ttcaccaatg ctcctgaatt ccaggetett etetteacce tetteeteet getgtatetg 120
atgatettet gtggeaacae tgeeateate tgggtggtgt geaeceaeae tteettgeae 180
acacccatgt atticticct cagtagictg tetticetgg aaatatgeta caccacagat 240
gtggtacccc tgatgctttc taacatcttt gggacccaga agcctatatc gctggctggt 300
tgtgggactc aaatgttett etteeteact etgggaggta etgattgett tetettggea 360
attatggcct atgacaggta tgtggccatc tgccaccctc tgcactacaa cctcatcatg 420
accaagaage tgtgtgttca gatggtgatg ggctctttaa gettggcaet gtttetetee 480
ctgcagetca etgeettaat ttteaceetg ecettetgtg gacattaeet ggaaateaac 540
cactttettt gtgatgtgee tecagteetg egeetageet gtgetgaeat teatgtgeae 600
caggeagtee tetacgtagt gggeateetg gtgetgaeag teceattett gettatette 660
atttectatg tgtteattgt tteeaceate etgegeatge getetgeaga gggtegeeaa 720
agggeetttt ceaectgete tteteaecte actgtggtet tgetaeagta tggtggetgt 780
agettggtgt acetgaggee eegetegage agetetgatg atgaggaeeg geaaatagee 840
ctgqtctaca cctttqtqac tccattactc aaccetctqa tttataccct tagqaacaag 900
gatgtcaaag gtgctctgag gaactccatc ttctgtaaat cagcatctca ctgtagttaa 960
<210> 1139
<211> 957
<212> DNA
<213> Mus musculus
<220>
<223> MOR266-9
<400> 1139
atggtggata gaaacccttt cttcaacaaa tctggtccac cagagttcgt gttccgtgtc 60
ttaaccaatg ttccggaatt tcaagcaatc ctcttcaccc tcttcttcct tctctacttg 120
atgatectet gtggcaatae caccattate tgggtggtgt gcaaccacag etceetgeae 180
acteceatgt acttetteet gggeagtetg teatttgtgg aaatetgeta eateaeagat 240
gtggtgccct tgattctttc caacatcttt ggagaccaaa aacccatatc actggctggt 300
tgtgggacac aaatgttett tttetetgte tttggetgea eggattgttt tetettgaeg 360
gtcatggctt atgacagata tgtggccatc tgtcacccac tacactacaa cctcatcatg 420
acccagaaac tgtgtgtcca gatggtaata ggctctttga gcttggcact tcttctccc 480
ttggagetta etgeetttae ttteacattg eegttetgta gacacegeet tgaaatcaac 540
cactteetet gtgatgtgge teetattatg egeetggeet gtgetgaeat eeatgtgaac 600
caggeagtee tetatgtagt tagtateeta gttetgacag teceatteet geteatttte 660
atctcttatg tgttcattgc ttctaccatt ctacgcatgc attctgcaga gggacgccag 720
agggeattet ceaectgtte eteceatete aetgtggttt tgetacaata tggetgttgt 780
agoctagtgt acctgagace ecgetecage accteagagg atgaggateg ecaaattgee 840
ctggtttata tctttggtac tccattacta aaccctctga tttacaccct caggaataaa 900
gatatcaaag atgetttgag gaactettte tteeatgtac cagettetga cactagt
<210> 1140
<211> 927
<212> DNA
<213> Mus musculus
<220>
<223> MOR228-2
```

```
<400> 1140
atggctgaca tacacaatgt gactgagttc ctttttctgg gactctcttc taacaaagag 60
gtggagatag tttgctttgt aatatttctg ctcttgtaca tggccattgt qcttggqaat 120
cttctcatgg tggtcactgt ggtagccagc agaagtcttg gatcccccat gtacttcttt 180
cttggctacc tctcctttgt ggagatctgc tactcctcca caacagctcc aaaactcatc 240
ttggaccttc tagctgaaaa aaaatccata tctgtatggg gctgcatgac acagcttttc 300
ttcatgcact tctttggtgg cgctgagata ttcctgctca cagtgatggc ctatgaccgt 360
tatgtggcca tctgcaagcc cctgcactac accagcatta tgaaccgaaa tgtgtgtgca 420
gteetegtag gaacageatg gataggagge tttgtgeatt cetttgeeca aataettete 480
atctttcctt tgcccttctg tggccccaat atcatcgatc attatttctg tgacttgctt 540
cctttgctta aacttgcctg ctcagacacc ttccttattg gcctactgat tgttgccaat 600
gegggaacte tgteagtgat eagetttgtg gteetettag eatectatgt ggteatettg 660
ttccatctaa qaactcaqaq tqctqaqqqa cqqcqcaaaq ctctqtccac ctqtqqatcc 720
catgtcactg tggttatatt gttctttggt ccatgtgtct tcatctattt gaggccttct 780
gataccetae etgtagacaa gatgataget gtgttetaea eagtgataae teccetgete 840
aatcctctca tctactccct gagaaatgca aaagtgaaga aaaccatgaa gagtctatgg 900
ttcaggacaa tgaaagtaga tgagaaa
<210> 1141
<211> 927
<212> DNA
<213> Mus musculus
<220>
<223> MOR228-3
<400> 1141
atggctgaca tacacaatgt gactgagttc atttttctgg ggctctcttc caatcaagag 60
gtgcagaaag tttgctttgt gatatttctg ctcttgtaca tggccattgt gcttgggaat 120
cttctcatgg tggtcactgt ggtagccagc agaagtcttg gatcccccat gtacttcttt 180
cttggctacc tctcctttgt ggagatctgc tactcctcca caacagctcc caaactcatc 240
ttggatetee tagetgaaaa aaaateeata tetgtatggg getgeatgae acagetttte 300
ttcatgcact tctttggtgg cactgagatt ttcctgctca caatgatggc ctatgaccgt 360
tatgtggcca tctgcaaqcc cctgcactat actagcatca tgaaccaaag tgtgtgtgca 420
gtcctcatgg gaacagcatg gataggaggc tttgtgcatt cctttgctca aatacttctc 480
atctttcctt tgcccttctg tggccccaat atcattgacc attattcttg tgatttgctt 540
cctgtgctta aacttgcctg ctcagacacc ttcctcattg gtttgctgat tgttgtcaat 600
gggggaacac tgtcggtgat cagctttgtg gtcctcttag catcctatgg agtcatcttg 660
ttccatctga qaactcagag tqctgaggga cqqcqcaaag cactqtccac ctgtggatcc 720
catgtcactg tggttatatt gttctttggt ccatgtgtct tcatctattt gaggccttct 780
gataccetae etgtagacaa gatgataget gtgttetaea eagtgataae teeeetgete 840
aatoototoa totaotooot gagaaatgoa gaagtgaaga aagooatgaa gagtotatgg 900
ttcaggacaa tgaaagtaga tgagaaa
                                                                   927
<210> 1142
<211> 927
<212> DNA
<213> Mus musculus
<220>
<223> MOR232-9
<400> 1142
atggagaata aaaggaatgt gactgaattc atcttgatag gtcttacaca gaacccccaa 60
atgcagaaag tagtgttcgt gacatttttg gttctataca tgacaacaat ttcaggcaac 120
ctcctcattg tggtcactat catcaacage caggetetga attececcat gtatttette 180
ctgagccacc tctccttgat agatacaatt tacacttctt cttcagctcc aaagctgatt 240
```

```
geggaetece tteaagagaa caaagteate teetttaatg gatgeatgge teaagtetat 300
gcagagcaca tttttggtgc tactgagatc atcctattga cagtgatggc ctatgaccgc 360
tatqtqqcca tctqcaaacc tctqcactat atqaccatca tqaqccacaa qctatqcatt 420
ctcctggtgg gggtagcctg gactggagga tttctccatg caactattca gatccttttt 480
acagtgtggc tgcccttctg tggccccaac atcatagacc attttatgtg tgacttgtat 540
ccattgttgg aacttgtttg catggacaca cacatccttg gtctctttgt ggctgccaac 600
agtgggttca tctgcctatt taatttcctg ctcttgatgg gatcctatgt gatcatcttg 660
cgctctttaa agaactatag cttagagggc aggcgcaaag ccctctccac ctgtgtgtct 720
catatcacag tggtagtttt attetttatt cettgeatat ttgtatatet aegtecagtg 780
accactttgc cacttgataa aggtgttgct gtgttttata ctatggtggc tcctatgctg 840
aatcetttaa tetacaeeet caggaatget gaagtaaaaa atgeaateaa gaagetetgg 900
agaaaaaaag taacttcaga tagtaat
<210> 1143
<211> 916
<212> DNA
<213> Mus musculus
<220>
<223> MOR251-5
<400> 1143
atgatgaatg ggacactggt cactgagttc ctcatcctgg gattctcaga aatgcctcac 60
cttcgggtac ctcttctctt cagcttcctc tgcctataca tggctgcaat ctcaggaaac 120
ttgctcatta tggtgacaat cagtgccagc ccagccctgc atacccccat gtacttcttc 180
ctggtcaact tggccattgt ggacatcctc tgcacctcca ccatcctacc caaactactg 240
gacagcatga tgacaggaag gaccatetet tacggggget gcatggeeca getettette 300
ttcacatggt cactgggage agagettetg etetteteag etatggeeta tgacegettt 360
gtggccatct gctgtcccct gcactacagt gcttggatgg gccccagggt gtgtgcattc 420
ctggctggca ttgtctggac tatcagcctg actaacacca gcgtgcacac aggcctgatg 480
ttgcgtctac cattctgcag ctccaatgtg atagagcact tcttctgtga gattccccca 540
ctgttgaagc tttcctgtgc tccaacqcaa ttgaatgagg ccatggcctt cgctgcggat 600
qtqttcctqq ctqtaqqqaa cttctctqtq acaatcctct cctatqqctt tattqtqqcc 660
agcatectga agatecqqte agetqaqqqe aaqeqaeqaq cettetecae etqetetqea 720
caccttatcg tggtcaccat gtactactcc actgtcatct acacctacat tcgcccttca 780
tccagctact cactgaacaa ggacaaggtg ggtgtccatc atctacacct cagtggcacc 840
caccttgaac cccctcatct acaccctgag gaacaaggat gtcaaagttg cactccggag 900
                                                                  916
acttctctcc tgctgc
<210> 1144
<211> 942
<212> DNA
<213> Mus musculus
<220>
<223> MOR266-10
<400> 1144
atggaggagg aaaatcagac aggagtggta tatttccact tccgcccctt ttcaaccaac 60
tetacagtgg ettecetagt gtttgtggge ttettgetge tgtatetagg aagteteatt 120
ggaaacctca ccattgggct cacagtctgg caggatcact ccctccatac cccgatgtac 180
ttottccttt ttgtgttggc cacattagag cttggctatt ccaccaacat tgctccactg 240
actetageta geattetete catggggaag atgettatet etetgeecag etgtggggee 300
cagatgttct tcttcatcct ccttggagga tctgactgtg tcctgctggc catcatggcc 360
tatgacaggt atgtggccat ctgtcatcca ttgcattaca gcctcattat gagttggcag 420
ctctgtgggc agatggcttt aggttctctg gggctgggtt tccttttgtc actgcctttg 480
```

```
accattetga tetgecacet eccattetgt ggecacaatg aaatetacea ettettetge 540
gacatgeetg cagteatgeg cetggeetgt acagatacce atatacacca ggeagetete 600
tttgccatca gcgtggctgc agtagccatt ccttttctcc ttatctgtct ctcctatggt 660
tgcattgtgg ctaccatcct gaggatgacg tcagcagagg ggaaacgccg ggctttctcc 720
acctgetett cacaceteet egtggttgte etgeagtatg gatgttgeae eeteatetae 780
cttcgcccta gctccagcta ctccccggaa gaaggccggg cagtatctgt tgtctatacc 840
ttcttctccc cattgctgaa tcccttaatc tacagtttaa ggaaccaaga ggtgaccgat 900
gcagtaaaaa gacttttgac aagaatgttc tggttcagaa ag
                                                                  942
<210> 1145
<211> 939
<212> DNA
<213> Mus musculus
<220>
<223> MOR204-32
<400> 1145
atggagcctg gaaactacac agttgtaaca gaattcattc ttttagggtt aacagatgat 60
attacagtca gtgtcatttt atttgttatg tttctaatcg tctattctgt tactttaatg 120
ggtaacttga acataattgt gctaatcaga accagecete agetteacae eeccatgtae 180
cttttcctta gccatttggc ctttctagac attgggtact ccagctcagt tacacccatc 240
atgctgaggg gctttctcag aaagggaaca tttatccctg tggctggctg tgtggctcaa 300
ctctgtattg tggtggcatt tgggacatct gaatctttct tgctagcttc catggcctat 360
gaccgctatg tggccatctg ctcacctttg ctctactcaa cacagatgtc ctccacagtc 420
tgcatcctcc tagttggaac ttcctaccta ggtggatggg tgaatgcttg gatatttact 480
ggttgctcct taaatctgtc attttgtggg ccaaataaaa ttaatcactt tttctgtgac 540
tattcaccac tattgaagct ttcttgttct catgactttt cttttgaagt cattccagca 600
atctcttcgg gatccatcat tgtggtcact gtgtttatca ttgctctgtc ttatgtctac 660
atcettgtgt caatcetgaa gatgegetet actgaaggte gecagaagge ettetecace 720
tgcacttccc acctcactgc agtcactctg ttctttggga ccatcacatt catttatgtg 780
atgccccagt ccagctactc cacagaccag aacaaagtgg tgtctgtgtt ttacacagtg 840
gtgatcccca tgttgaatcc cctcatctac agtttcagaa acaaagaggt taaagaagcc 900
atgaaaaaac tgattqctaa aacacattqq tqqtcctqa
                                                                  939
<210> 1146
<211> 929
<212> DNA
<213> Mus musculus
<220>
<223> MOR225-11
<400> 1146
atggaaaaaa gcagtaatat cacagtcttt attttattgg gactttccca aaataagaac 60
actgaaattc tctgctttgt atttttttt tattttgcta cattgctatt tggatgggca 120
atgttctcat catggtttca atcacatgca ctcacctcgt tgagcaaccc atgtatttct 180
tecteaacta teteteacte tetgacetet getacacate cacagtgace ectaaattaa 240
tgactgactt actggcagaa aggaaagtta tttcctataa taattgcatg atacagctct 300
tcacaactca tttatttgga gggattgaaa tctttattct cacaggcatg gcctatgacc 360
gctatgtggc catctgcagg cccctgcatt acaccatcat catgagcaga catagatgta 420
acttgateat catgaettgt tgeactgggg gatttgtgea eteageeagt caacttette 480
ttactqtctt cttaccattt tqtqqcccaa atqaqataqa tcactatttc tqtqatqtqt 540
accettigtt gaaattggce tgtteeaata cacacataat aggtetttta gteattgeta 600
actotggctt aattgcttta gtgacgtttg ttgtgttgat qacctcttat tttttcatat 660
tgtataccat aagggcatat tctgcagaaa gccggagcaa agctctatct acttgcagtt 720
cccacttaac cgttgtagtc ctgttttttg cacctgcact attcatttac atcagaccag 780
```

```
ccaccacatt tccaqaaqac aaaqtatttq ctcttttcta taccatcata qcacccatqt 840
tcaatccact gatctacaca ctgagaaaca cagagatgaa gaatgcccta cggaaagttt 900
ggggtcatca aggacttctg aaggggagg
                                                                  929
<210> 1147
<211> 970
<212> DNA
<213> Mus musculus
<220>
<223> MOR198-4
<400> 1147
cacacaaaca gcactaaaat cacagtaatt cattttactg gggctcacag atcgcccaga 60
actocageet etectettig teetgtttet gtttatttae etigteaceg tettaggeaa 120
catgggcttq atggctctqa ttagactqqa ttcccqcctt cacaaqccta tqtacttctt 180
cctcagtaac ttggcatttg tggatctgtg ttatacctca acagccaccc cacagatgtt 240
gaccaatttc ttatcagaaa agaagacaat ttccttcatt ggctgcttta tccagtgcta 300
cetttteatt geacttetee ttacagagtt ttatatgetg geagecatgg cetatgaceg 360
ctatgtggcc atatgcaacc ctctgcgtta cagtgtgaaa atgtccaggc gagtctgcat 420
ctgcttggcc atgtgtcctt atatctatgg cttctcagat ggactattcc aagccatctt 480
gaccttcagt atgaccttct gtaaatccaa tgtcatcaac cacttctact gtgctgaccc 540
accacttatt aagctatctt gctctgatac ttacaaaaaa gaacatgcca tgttaatatc 600
agggagettt aacettteca geteeettae aateateetg gtgteetatg cetteattat 660
tgctgccatc ttaaggatca aatcagctga aggaaggcac aaggcattct ctacttgtgg 720
ttcccacatg atggctgtca cattgtttta tgggacactc ttctgcatgt atgtaagacc 780
acctactgac aagactgttg aagaatccaa aataatagct gtcttctaca cctttgtgag 840
tectetgetg aatecattga tetacagtet gaggaataaa gatgtaaage aggeettgaa 900
aacaatactc aggcaaaacq tcatcaggac agcattgatq cqtccacctt ccaacaaact 960
gcaacaataa
                                                                  970
<210> 1148
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR143-1
<400> 1148
atggaagcag agaaccatac agccatagta catttcctcc ttattggtct ttcagaagat 60
cctaaaattc aatctgttct ttttggacta ttcctatcta tgttcctgat taccatgctt 120
ggaaactttc tcattgtctt agtcaccage tgtgactccc accttcacac ccccatgtac 180
tttttcctct gcaacctgtc atttgttgac atttgtttaa cctccactac tatccccaaa 240
atgttggtga acatttacat qcacaccatg aaqatatcct acacagagtg ccttactcaa 300
gtatattttt ttaataattt tcttggaatg gataattttc tactgaccat tatggcctat 360
gategttttg tggccatetg teatecaett aactaeaeag teateatgaa eeetegaate 420
tgtggccttc tggttctttt atcttggatc attatgttct gggtttcctt gattcatatg 480
ctgttgatga aacaactgaa cttctctact agcactgaaa tcccacattt cttttgtgaa 540
ctcactgagc ttctcagggt ggcccgctct gatacccaca taaataacat ttttctgtat 600
ttggttactg cagtgctagg tatgtttcct gtcattggga tagctttctc ttattttcac 660
attgtctctg ctttaatgaa aatgtcctcc attaagaata agtataaagc cttttccacc 720
tgtgggtctc acctctgtgt ggtatccatg ttctatggga caggatttgt agttcatctc 780
agttctgctg tagcccattc atccaaqaqa aacacaatca cttcaataat gtacactgtt 840
gtcaccccta tgttgaaccc cttcatctat agcttgcgaa acaaggatgt aaagggggcc 900
ttagtaagac tccttagaag agttaaattt tgtcct
                                                                  936
```

```
<210> 1149
<211> 916
<212> DNA
<213> Mus musculus
<220>
<223> MOR248-15
<400> 1149
atggaagaag gaaaccagac tgtggtgtct gagtttattt ttcagggact ttgtgcttca 60
aaggaactac agetetteet teetgetgee atttteeate etetatetaa tggetgtggt 120
aggeaacete tttgttgtga tattgateat cattgateat cateteeatt eteccatgta 180
ctttctgtta gctaatctat catttattga cttctgcctt tcctcagtta ccacccccaa 240
actgataact gacctcctaa aagataacaa aaccatttcc tttggggggct gcatgagcca 300
gateetetgt gtgtaettet ttggaggaag tgagatggtg ettettgtaa caatggeeta 360
tgaccqqtat qtqqccatct qcaqqccact ccactacaqc aqcatcatqq qcaqacaqaa 420
gtgcatctgg cttgttgtga tatcatggac cattggcttt atacatgcca tgagtcaact 480
gatactgatt ttggatctgc ctttctgtgg acctagagtg atagacagct ttttctgtga 540
tatttctttq qtqatqaaat taqcctqcat qaatactqat actctqqaaa ttctaataaa 600
tgctgacagt ggtgttttgg caacaacttg tttcatcctc ttactgatat cttatactaa 660
cattctatta actgttcaac ttcactctaa agatggttca tcaaaggcat tatctacatg 720
cacateceat ateatagtgg ttttgetgtt etttgggeea gteattttea tetatetgtg 780
tccagttagc atcacctqqq ttgacaactt tcttgccqta ttttactcag tcatcacacc 840
tctccttaat ccagccatct acacactgag aaacaaagat attaaaaaatg ccataaagaa 900
                                                                  916
gctgataaac cacttg
<210> 1150
<211> 831
<212> DNA
<213> Mus musculus
<220>
<223> MOR248-16
<400> 1150
ctaccatttt ccatcctcta cctgatggct gtggtaggca acctgtttgt tgtgatattg 60
atcatcattq atcatcatct ccattctccc atqtacttct tqttaqccaa tctatcattt 120
attgacttct gcctttcttc agtaaccacc cccaaactga ccatagatct cctaaaagaa 180
aataaaacca tttcctttgt agggtatatg aggcagatcg tctgtgtgca cttctttgca 240
ggaggtgaga tggtacttct tgtaacaatg gcctatgacc ggtatgtggc catctgcagg 300
ccactccact acagcagcat catggacaga cagaagtgca tctggctcgt tgtgatatca 360
tggattgttg gatttgtgca tgccattagt cagatgctct tgattttgga tctacctttc 420
tgtggaccta gagtgataga cagctttttc tgtgatattc ctttggtgat gaaattagcc 480
tgcatgaata ctgatactct ggaaatccta ataaatgctg acagtggcat tttagcaaca 540
acttgtttca teetettget tatatettat acttacatte tattaactgt teaacatege 600
tctaaagatg gctcatcaaa ggccctatct acatgcacat cccatatcat agtggttctg 660
ctgttctttg ggcccatcat ttttatctat ctgtggccag tcagcatcac ctgggttgac 720
aagtttcttg ctgtatttta ctcagtcatc acacctctcc ttaatccagc catctacaca 780
ctgagaaata aagatattaa aaatgccata aagaaactca taagtcacaa g
<210> 1151
<211> 885
<212> DNA
<213> Mus musculus
```

```
<221> variation
<222> (44)...(63)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR248-17P
<400> 1151
agttggcata agtaaaaata agttaagtgt ttgactcacc attnnnnnnn nnnnnnnnn 60
nnnctcttac taccattttc tgtcctctat ctgatgactt tggtagataa cctctttgta 120
gtgatattga tcatcactga tcatcatttc aattctccca tgtactttct gtcaqctaat 180
ctatcatttg ttgacttcta cctttcctca gtaaatacac ccaaactgac catagatctc 240
ctaaaaqaaa ataaaacaat ttcctttqqq qqctqcatqa qccaqatcct ctqtqtqcat 300
ttctttggag gaagtgagat ggtgcttctt gtaacaatgg cctatgacca gtatgtggcc 360
atctgcaggc cactccactg cagcggcagc atggacagac agaagtgcat ctggctcgtt 420
gtgatatcat ggattgttgg atttgtgcat gccattagtc agttgctctt gatttttggat 480
ctacctttct gtggacctag agtgatagac agctttttct gtaatattcc tttggtgatg 540
aaattageet geatgaatae tgataetetg ggaateetaa taaatgetga cagtggeatt 600
ttagcaacgt attetteac tetettactg atatettata ettatattet attaactgtt 660
caacatcgct ctaaagatgg ctcattaaaa gcactatcca catgcacatc ccatatcata 720
gtggttctgc tgttctttgg gcccatcatt tttatctatc tgtggccagt aaacatcact 780
tgggtggaca agtttcttgc tgtgttttat acagtcatca cacctctcct gaatccagca 840
atctatacac tgagaaataa agatattaaa aatgctataa aaaac
                                                                   885
<210> 1152
<211> 939
<212> DNA
<213> Mus musculus
<220>
<223> MOR193-1
<400> 1152
ctgcatggag agacagaacc ttcaccagtc gtgaaagatt tcatcctgat aggcatcact 60
aatcqqcctq aqctqaaqqq tccattqttt qqqctqttcc tcatcatcta tctqatctca 120
ttaatgggaa atatgggcat gatcatactc acaatagtgg accetcgact gcaaacaccc 180
atgtacttct ttctcaaaca cttggctgtc actgatcttg gttattctac agctgtagga 240
cctaaaatgt tagaaaattt tgtcgtgaac caaaatacaa tatcctatta tctttgtgct 300
ttacagctag cttgctttct tctgttcatt acctgtgagc tttttatttt gtctgccatg 360
tectatgace getatgtgge catetgeaae eetetgetet acaatgteat catgteaaag 420
aagaaatgtt ggctactaat agtaattgct tatctgtatg gtttgtttct gtctcttata 480
attactttaa agatgttcag gctttcattc tgcagctaca atataatcaa tcattttttc 540
tgtgactgta tccctttgat accattgctc tgttcaaaca ctcatgaaat tcagttgata 600
attttagtat ttgccatttt tgattcgatt tgttctcttc tggttgttct tgtgtcttac 660
ctcctcatcc tcataaccat tctgaggatg aactctactg agggcaggca caaggctttt 720
gcaaattgtg gatcacacat aactgtcgtc accgtcttct atgggacttt gatatctatg 780
tatttgcagc ctaattatag tcactctttt gacactgaca agttggcatc catcttttat 840
accatgatta tececatgtt gaateeettg atetacaget tgaggaacaa ggatgtaaag 900
aatgctggac agaggatatg gaagaagttg tgcaagatt
                                                                   939
<210> 1153
<211> 948
<212> DNA
<213> Mus musculus
<220>
<223> MOR284-2
```

```
<400> 1153
atggacctga agaataaaac tacatccagt ttcatcctgc tggggctctt tcccagctgc 60
aggtacccaa acctecttat etectteate etecteatet acaccetgge eteggetgga 120
aactccctct tgatactcct catctggctg gacccccgtc tccacacacc catgtacttc 180
ctgctcagtc agctgtctgt cattgacctg gcttatatct cctgcacagt gcccaaggca 240
gccatcaact acttcaccgg gaggcggaac atctccttct ttgcctgtgc cactcagatg 300
ttttccttcc tcacccttgg ccttgctgag tgcatcttac tgacactaat ggcctatgac 360
cgttatgtgg ctgtctgtaa ccctctgagg tataccattc tcatgagccc caaggtctgt 420
ctgatgatgg ccgcctccac ctggatcgga gcagttaccg cagccctcgt tcataccgta 480
taccccatga attttcctat ctgcggctcc agggagatca atcattactt ctgtgagatg 540
eccgctatte tgagaatgte ttgtgtggat acatetgtet acgagatggt gaagtttgtg 600
tcaactatta tctttctcct gaccccattc actttgatcc tgacttccta taccctcata 660
ttcctcactg tcctcaggat gaactctccc aaggggcgga ataaagcctt ggccacctgc 720
tecteccace tgactgtegt gageetetat tttggteaag ecatetteat etacatgaeg 780
cccacttctt cccacacac cgaccaggac caggtaggtg ctgtgctggg caccatagtg 840
acceccatge teaateetet tatetacage etgagaaaca aggaagtgat aggggeeetg 900
cagaagtgca ccggcagatg ctgcagccgt gatagagttg gctccctc
<210> 1154
<211> 945
<212> DNA
<213> Mus musculus
<220>
<223> MOR256-47
<400> 1154
atgggagcaa ccaacgacag cacettcage catttcatee ttactggett etetgacegg 60
cctgagctgg agagggtcct cttcgccatc ctcctgcccg cctacctcct gaccctgctg 120
ggcaacagca ccatcatcct ggtgtccagg ctggacccgc accttcacac ccccatgtac 180
ttetteetea cacacetgte etteetggae etcagettea ecagtagete cateecacag 240
ctactctata acctcagcgg gccagacaag accatcagct atgtgggctg tgctctgcag 300
ctggtcctgt tcctgggcct ggggggtgtg gagtgcctgc tgctggctgt catggcctat 360
gaccgatttg tggcgatctg caaacctctg cactacatgg tcatcatgag ccccaggctc 420
tgcgtgggcc tggtctcagt ggcctggagc tgcggtgtgg ccaactcctt ggctatgtct 480
ccagcaactc tcagcctacc ccgctgtggg caccacaggg tggatcactt cctctgcgag 540
atgccagete teatcaggat ggcctgtgte aacacagetg tegttgaagg cattgcette 600
atcctggcaa taggcatcgt gctgtcgccc ctggtgttca tcttggtctc ctatggttac 660
attgtaagag cggtgttgcg aatcagctca gctgcaggac ggcagaaagc atttaatacg 720
tgtggctcgc acctcaccgt ggtctcgctt ttctacggaa atatcatcta catgtacatg 780
cagccgggga acagctcctc ccaggaccag ggcaagttcc tcaccctctt ctacaacatt 840
gtcacccctc tcctcaaccc tttgatctac acgctcagga acaaggaggt gaagggggcg 900
ctcagaaggc tgctcctggg tagccgagag acagggaaag taagg
                                                                  945
<210> 1155
<211> 942
<212> DNA
<213> Mus musculus
<220>
<223> MOR130-1
<400> 1155
atggaaggag ccaacctcag tggggtgtcc gagttcttgc tgctaggctt gtcacaggac 60
cccagacage ageagetget ettttetgee tteetgagea tgtacettet cacaggeeta 120
gggaacetge teateateet ggeeattget getgateeca ggetgeacae ecceatgtae 180
```

```
tttttcctgg ccaacctggc ctttgtagat gtctgcttca cctccaccac catccccaag 240
atgctggcca accatgtgtc aggacacaaa ggaatctctt actctggttg cctcacacag 300
atgttctttt tcatctggtt tgccqgcatt gacagcttct tgctgactgc catggcctat 360
gaccgctttg tggccatctg tcaccctcta cattatacaa cctcgatcac accacggctg 420
tgtggcttcc tggtcactgc atcctgggcc tcagcctttg caaatgccct gacccacaca 480
gtccttctga ctcgcctctt gttctgtggc cacaaccagg tcccccactt cttctgtgac 540
ctcagcccac ttctgaagct agcctgttta gatacctctc tcaatgacat catggtatac 600
actgtgggcg cattgcccat catcaccccc ttcgtgggca tcttgacctc ctacacacgc 660
atcttcacag cagtgttgag gatcccatct acaggaggga aatggaaagc attctccacc 720
tgtggctccc atctctccgt ggtgtccctc ttctatggga cactgattgg ggtgtacttc 780
agtoccacat cotoccacac agoccagaag gacacagcag otgoagtgat gtacactgtg 840
qtcacaccca tqatqaaccc cttcatctat accctqaqqa acaaggacat gaaaggtgcc 900
ctgatgacct ttgtccgaag gacggcagtc cttgttaggt ag
                                                                  942
<210> 1156
<211> 981
<212> DNA
<213> Mus musculus
<220>
<223> MOR276-2
<400> 1156
atgttttcag atgacccggt acagcagctg agcatggcca tgtggttgaa ccagtcatcc 60
acagatgact ttatcctctt gggcatcttt tcctacagcc caagagatct tcttcttttc 120
tetgtggtea tgetggtett cacageagea ttgtttggga atgeceteet cateeteete 180
atotgoactg accordact coacaccocc atgtacttot tootcagtca gototocotc 240
atggacatca tgttggtctg taccaatgtg ccaaagatgg cagtcaactt cctgtctggc 300
aagaagtcca teteettegt aggttgtgge atacaaattg geetetttgt etgtettgtg 360
ggatctgagg ggctcttgct gggactcatg gcttatgatc gctatgtggc cattagccac 420
ccaetteget atcetgteet catgaateag aaggtetgte tgeagateat tgggagetet 480
tgggcctttg ggatagcaga tggtctggtg cagatggtag tggtaatgac cttcccctat 540
tgtagcttga gggaggtgga ccacttcttc tgtgagatgc tctccttgct aaagttggcc 600
tgtgtggaca catccctatt tgagaagata gtgtttttt gctgtatctt catgctgctg 660
tttcccttct ccatcattqt agcctcttat acccgcatcc taggaaccqt actccatatg 720
cactctgcta aatcccagaa aaaggctctg gccacctgtt cctcccacat ggcagctgtc 780
tetteettet atggageage eatgtteate tacetgagae eaagacaata eegaaceeca 840
agccaggaca agatggtgtc tatcttctac acagtcctta ctcctatgct caaccccctc 900
atttataget tgaggaateg egatgtgata ggagcaetge agaaaggget ggacegatge 960
agggttggca gccagccctg a
<210> 1157
<211> 939
<212> DNA
<213> Mus musculus
<220>
<223> MOR170-11
<400> 1157
atgctcatgg ccatggagaa tgactcttct gtgactgagt ttgtttttat gggattaaca 60
gaacaacctg agttacagct geetttgttt tttgtgttet tgetgaatta tacagetace 120 -
gtgatgggaa atttgagctt agtggttctt atttgtctga attcacacct tcacaaccca 180
atgtactttt tcttgttcaa tttatccttg gttgatttct gttattcatt tgtttgtacc 240
cctaaaatgc taatgggttt tgtttctgaa aaaagcatca tatcttatac aggatgcatg 300
actcagctat tettettetg ettettetgtt aattetgagt getatgtget gacagcaatg 360
gtctatgatc gttatgtggc catctgtaag ccattggtat atgccatcct tatgtctcct 420
```

```
eggatgtgtt ceetgetaat gattgggtee taettaatgg gatttgeaag tgeeatgget 480
catactggct gcatgattag gctcaagttt tgtgatttga acatcatcaa ccattacatg 540
tgtgaaatat tccccctgct ccagctctcc tgcagtagta cctatgccaa tgaacttgtg 600
agetetetta ttgeetgtat agttgteatt gtatetggte ttgttatett aatgteatat 660
gettecated tettaaatgt tgtteagatg teateageta eaggttggte caaageeatg 720
ggtacttgtg gttcccatat cataactgtt agtctattct atggttctgg actgcttact 780
tatgtcaaac cagcatccgc tgaatctgta gatcagggga aatttttctc agtgttttat 840
actettatgg tteccatget gaateetett atttacagte teaggaacaa ggatgteaaa 900
cttgcagcaa agagaaccat gaagagaatc acaatctga
                                                                 939
<210> 1158
<211> 927
<212> DNA
<213> Mus musculus
<220>
<223> MOR140-1
<400> 1158
atggagttga aaaatgacac acaaatttca aaatttattc tcctgggaat ttcagaggat 60
cctctatggc aacctttcct ttttggacta tttttgttca tgtacttggt cactctgctt 120
gggaaccttc tcattatcat tgccaccatt acagattccc atcttcacac acccatgtac 180
ttcttccttt ccaacctgtc ctttgcagac atctgcttta cttctgctag catcccaaag 240
atgctagtga atatacagac aaagaacaag gtgataacct atgaaggttg catttctcaa 300
gtattctttt tcatactatt tggagtttta gataactttc ttctagctgt gatggcctat 360
gaccgatatg tggcaatctg tcaccctctg cactatatgg tcatcatgaa ctgccgcctc 420
tgtggatttt tagttttggg gtcttgggtc acaacagcat tgaattcctt gctgcagagt 480
tcaatggcac tgcggctgtc cttttgtaca gacttgaaaa ttccccactt tgtttgtgag 540
cttaatcaac tggtactact tgcctgtaat gacacctttc ctaatgacat ggtgatgtac 600
tttgcagcta tactgctggg tggtggtcct cttgctggca tcctttactc ttattctaag 660
atagtttcct ccatacgtgc aatctcatca tcacagggga agtacaaagc attctccacc 720
agttettett ttacacaaaa etcacaetca aetgeaegag catetgttat gtacagtgtg 840
gtcaccccca tgttgaaccc attcatctat agtttgagga ataaggacct aatgggagct 900
                                                                 927
ctgagaagac tcttaagaag gaagtca
<210> 1159
<211> 948
<212> DNA
<213> Mus musculus
<220>
<223> MOR259-8
<400> 1159
atgtgggtgg ttctaggaca gaaccaaagt tgggtctctg agttcatcct gattggcttc 60
tecagegace ceacaaceaa cageateete tteattqtet teetteteat etacetgage 120
teagtactgg geaacggget catcateatg etggtetgee tggacacaca getgeacact 180
cccatgtact tetteetete taccetetee etgttggata tgagetatgt caccaccace 240
atgececaga tgttggtgea tettettget eacteteaga eeateteett tgttggetge 300
tggctgcaga tgtttgtttt cagtgccctg ggtataactg agtgcacctt ctttgttgtc 360
atggettatg accggtatgt ggecatttgt tatecactge getatactgt catecteaac 420
tggggcctct gcatacattt gacagcaggg tcttgggtct gtggtttatt ctcttctttg 480
ttacatactt ttttcaccat gagtctgcca tattgtgggc caaacagggt caaccactac 540
ttctgtgaag gtccttcagt gcgtagcctg gcttgcatgg atactcatgt tattgagatg 600
gtggattttg tattgagtgt ttttgtgatt gtgattccaa tttccctcat tgtggcctcc 660
```

```
tacattggta ttgccaaggc aattctcaag atcaagtcca cagaggggcg ctgcaaggct 720
ttctctacct gtgcctccca cctaactgtg gtcacattct tctatgctcc agccacttac 780
atctacatga ggcccaactc cagttactcc cctgagagag acaagcagat ctcactcttt 840
tataatacct tcacagcctt gctcaaccct gtggtctata gtctgaggaa caaagatatc 900
aagagggcat ttttcaaggt gatgggacat ggtaggatgg actactga
<210> 1160
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR128-1
<400> 1160
gaaactagaa accaaaccat catctctgac ttcctcctta cgggcttctc tgaccaccca 60
gagcagcagc ctctcctgtt cacactcttc ttgggaatgt acctggtgac cttattgggg 120
aatctgttca tcatcctggc cattgtctct gaccagcatc ttcatacacc catgtacttc 180
ttcctggcca acctttcctt cattgataac tgcttaacct gcaccattgt ccccaaagtg 240
ctgactaaca tccaaaccca gcatcaaacc atctcccaca ctgggtgcct tctgcagatg 300
tatttettea tgacaatgge catgettgat gactteetae tggetgtgat ggeetatgat 360
cgctatgtgg ccatctgcct tccactacac tacaccacta tcatgtgtcc ccaaagatgc 420
etgttgetgg tggccacate etggetetge tecaacetee tggcettate acteatacte 480
cagatggete aagteteett etgtgeetee catteeatte cacacttttt etgtgatett 540
ctcccactcc tcaagcttgc ctgttcagac acccatacct ttcagctcat aatgtttgct 600
gaagetgete tateaggtgt ggteeetett acttgtgtee tagtetetta tgeeeatate 660
atgaacacca teeteaagat eccatettet gggggaaage ataaagtett etetaeetgt 720
ggttcacate tgacagtggt cactetgtte tatggaactg tetttetggt gtatttecag 780
ccatcatcct cctactctga aaatactgga atagtggctt cggttgttta tacaatggtc 840
acccccatga tcaatccttt tatctacagc ttaaggaaca aagacatgaa gggagctttg 900
tggaaactat ttggcttggg gaaacactgt aatctg
                                                                   936
<210> 1161
<211> 930
<212> DNA
<213> Mus musculus
<220>
<223> MOR221-2
<400> 1161
atgaacaatt ccaccctggt gactgagttc ctcctggagg tttttgctga gtcttgcgag 60
ctcagaatcc ttctcagtgt gctgttcctg ctggtgtacc tgggcagcct gttcgggaac 120
cttatcatca tcattgttac tacagttgac cagacactga acacacccat gtatttcttc 180
ctcaggaatc tgtctattgt agacatgtgt tatgtttctg tcactgtccc aaatgcttgt 240
ttcaactctc tcactggcca gaggaatatt tctgtgactg ggtgtgcagc acaaatcttt 300
tttgtcttct tttgtgcatg tgtagagatg ttttttctca ccatcatggc ccaggaccgc 360
tatgtggcca tctgtaagcc tctgctctac cctgtgatca tgaaccacca gttctgtgtt 420
cagatgacac tggcttccct acatagctct cttatcattg caagtgtgca cactttcaaa 480
actttccaac tgtccttctg tcactctaat gtggttcctc agttcttctg tgatatcccc 540
tetttgttga agettteatg tteagatace tttaacaaca aactettaat getaatetet 600
gccattatca ttggttgcag ctgctttaca ttcattgctg tatcatattt taggatatta 660
tcaactgtgt tgaaggttcc tgtcaaagga gagagaggga aagccttttc cacctgtgtc 720
cctcacattg ttgtggtgtc tgtgtttctt agttcttcta cctatgtgta tctaagacct 780
ccagtaccaa cattagaagt agttaaggag atggctcttt ctgtgtctta tacgattgtc 840
ccaccattct taaatcctat catctatagt cttagaaaca gacagataaa ggaggctgtg 900
```

```
<210> 1162
<211> 939
<212> DNA
<213> Mus musculus
<220>
<223> MOR153-3
<400> 1162
ttctttagga atacagagta taaaaatcaa acatttgctt cagaatttat tcttctggga 60
ttgacagatg atccagaact gcagctcatc ctctttggaa ttttcctctt catgtatctg 120
gtcacagtgc taggcaatct catcatcatc tgcgcagtca gtcttcatcc caaactccat 180
accocaatgt acttetttet etegaacetg teetteaetg acatetgett cateaceage 240
acagtcccca agatgctggt gaatatccag aaacagaaca atgccatcag ttacccagat 300
tgccttacac agatgtactt tgttattttt cttggtggaa tggaaaactt tcttcttgca 360
gcaatggctt atgategeta tgtggccate tgccatecae ttagatacae ggteattatg 420
aatccaagca totgtattot gotaactttg ttgtcagtgc toagtagcac gatagatgcc 480
ctgctacaca gcctgttggt tttgcgacta tccttctgca catacttgaa aatcccccac 540
tttttctgtg aacttgctca tataatcaag ctgtcatgtt ctgacactct catcaataac 600
atagtggtat acttggcaac tttcatattt ggtggacttc cattttgggg cattatttta 660
tettatgtte aaattgteta tteagttttg aaaaageeet eagtaagagg tagttacaag 720
qccctttcca cctqtqqqtc acacttqtca qttqtttccc tqttttatqq ctcaqtqatt 780
ggggtctata tcagcttcgc agtgactgac tcatctagaa aggctgcagt agcttcggta 840
ttgtatactg tggtccctca gatgctgaac ccctttgttt atagtctcag gaacaaagac 900
atgaaagaag ccgtgaggaa attatgtggt gggattctg
                                                                  939
<210> 1163
<211> 927
<212> DNA
<213> Mus musculus
<220>
<223> MOR228-4
<400> 1163
atggctgaca tacacaatgt gactgagttc ttttttctqq gactctcttc taatcaagag 60
gtgcagagag tttgctttgt gatatttctg tttttgtaca tggccattgt gcttgggaat 120
cttctcatgg tggtcattgt ggcagtcagc agaaatcttg gatcccccat gtacttcttc 180
ctcagctccc tctcctttgt ggagatctgc tactcctcca cgacagcccc aaaactcatc 240
gtggatctcc tagctgaaaa gaaatccata tctgtatggg gctgcatggc acagcttttc 300
ttcatgcact tctttggtgg cattgagatg ttcctgctta cgatgatggc ctatgaccgc 360
tatgtggcca tttgcaagcc tctgcactac accagcatca tgaaccgaca ggtgtgtaca 420
gtccttgtag gaatggcatg gatgggaggt tttgtccatt cccttgccca ggtccttctc 480
atcttccqct tqcccttctq tqqccccaat atcattqacc attatttctq tqatqtqctt 540
cctgtgctta aacttgtctg ctcagacacc ttcctcattg gtctgctgat tgttgtcaat 600
gggggaacac tgtcggtgat cagctttgtg gtcctcttat catcctatgc agtcatcttg 660
ttccacctga gaactcagag tgctgaggga cgtcgcaaag ctctgtccac ctgtgggtcc 720
catgicacty tygitique attitutique ecciqique teatetatet qaqaeeqaea 780
gccactcttc ctatagacaa gatggtaact gtgttctaca ccgtgataac tcccctcctc 840
aaccctatca tctactccct gagaaatgca gaagtgaaga aagccattaa gattctatgg 900
accagggcaa caaaagtaga taaaaaa
<210> 1164
<211> 897
<212> DNA
```

```
<213> Mus musculus
<220>
<223> MOR259-9
<400> 1164
cttggcttct ccagtgtccc cacaaccaac agcatcctct tcattgtctt ccttctcgtc 60
tacctgaget cagtectggg caacgggete atcateatge tggtetgeet ggacacacag 120
ctgcacactc ctatgtactt tttcctctgt accetetece tgttggatat gagetatgte 180
accaccacca tgccccagat gttggtgcat cttcttgctc attctcagac catctccttt 240
gttggctgct ggctgcagat gtatatgttc agtgccctgg gtatagctga gagcatcctc 300
tttqttqtqa tqqcttatqa ccqqtatqtq qccatttqct atccactqcq ctatactqtc 360
atcctcaact ggggcctgtg catacggttg gcagcaggga cttggatcta tggttccttt 420
tcctctttgt tgcatacttt cttcaccatg agtctgccat attgtgggcc caacagagtt 480
gaccactatt tctgtgaagg tccttcagtg cgtagtctgg cttgcatgga tactcacctc 540
attgagatgg tggacttggt gttgagtgtt tttgtggttg ttactccaat ttccctcatt 600
gtggcttcct atattcacat taccaaggca attctcaaga tcaagtccac ccaggcccgc 660
tgtaaatctt tctctacctg tgcctcccac ctqactqtgg tcacattttt ctatattcca 720
gccatttaca tctacattag gccaaactcc agctactccc ctgagagaga caagcagatc 780
tcactctttt acaatgtttt cacagccttg ctcaaccctg tggtctatag tctgagaaac 840
aaggacatta agagggcatt teteaaggtg atgggacttg gtaggatgga etggtga
<210> 1165
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR137-2
<400> 1165
qtqaqqaqqq aqaatcaqaq cactqtqttc qaqttcctcc tcctqqqqct ccccatcaqa 60
ccagagcate agaatgtett etteaceatg tteetggeea tgtacetgae cacagtgetg 120
ggaaacctgc tcatcatctt gctcatcagg ctggaccctc acctccacac tcccatgtac 180
ttetteetea gecaettgge ettetetgae atetetettt eateeattae agtteecaaa 240
atgctgatga atattcaggc tcagcaccat tccatctctt acaagggatg catctctcag 300
atgtattttt ttattctgtt tgtctgcctg gacaatttcc ttcttgcagc gatggcctat 360
gacaggtatg tggccatctg tcatcctctg cactatatca ctgtcatgag ggaggagctc 420
tgtgtctgcc tagtcgctgg gtcctggttc ttcagctgtg tccacgccct gctgcacacc 480
ctcctcttga tccaactgtc cttctgtgcc agtaatactg tccccaactt cttctgtgac 540
ctcactgccc tcctgaagct gagctgctca gacatctccc tcaataagct agtcatcttc 600
actgagggag gattactttt catcctgcct ctgagtagca tcatgggctc ttatattctc 660
ataggaagaa ctgccttgaa ggcccctcc acaaagagat tcattaaaac cttttctacc 720
tgtggctccc atctccttgt ggtgtctttg tactatggga cacttgcagg tgaatacttt 780
ttctcttcat tccagaactc cagtgacaaa gacatagtgg cttctgtaat ttatacagta 840
gtcacaccct tgctgaaccc tttcatctac agcctgagga acagtgatat aaaacaggct 900
ctagaaattg ttgtcactaa gatcaactgc tttaag
                                                                   936
<210> 1166
<211> 951
<212> DNA
<213> Mus musculus
<220>
<223> MOR42-3
<400> 1166
```

```
atgtcagggt ggagcaatgg cacctacaat gagtcctaca ccagcttcct cctcatgggc 60
ttcccaggga tgcaggaagc cagagccete etggtgetge cetteetcag cetetacetg 120
gtgatcctct tcaccaatge cetggtcate cacaeggtgg cateceageg cageetgeae 180
cageceatgt acetgeteat tgecetgete etggetgtea atatetgege tgecaceace 240
gtggtgcccc ccatgctctt cagcttctcc acacgcttca accgcatctc cctccctcga 300
tgcttgggac aaatgttctg catctacttc cttattgtct ttgactgcaa catcctcctg 360
gtcatggctc tagatcgcta tgtggctatc tgctaccctc tccgctaccc agaaatagtg 420
acaggacagt tactggctgg tctggtggtg ctggcagtca ccaggagcac aagcattgtt 480
gctccagtgg tggtgctggc ctcgcgggtt cgcttctgtc gctcagatgt gatccqccac 540
tttgcctgtg agcacatggc cctgatgaag ctttcctgtg gggacatctc gctgaataag 600
acggtgggac tcactgttcg catcttcaac cgagtcctgg atatgctcct gttaggtgcc 660
tectaetece geateateca tgetgeette aggateteat caggtggage aeggtecaaa 720
geoetgaaca cetgtggete ceacetgetg gteatettea eegtetacte etceaceatg 780
tecteateca ttgtetaceg tgtggeaege actgeetece aagatgtgea caacttgete 840
agtgetttet atetgttget eccetgtetg gteaaceeea teatetaegg ggeeagaace 900
aaggaaatca ggcagcacct ggtagctctg ttccaaagga ctcagcaaca g
<210> 1167
<211> 927
<212> DNA
<213> Mus musculus
<220>
<223> MOR250-6
<400> 1167
gtgttattga atcaaacatt agtcaccgaa tttctcctat tgggagtgac agacatacaa 60
gaactgaacc ctattctgtt tgtcacggtc cttgccatgt actttgtaaa tgtggctggg 120
aatggagcca teetgetgat tgteatttea gateeaagae teeacteaee tatgtattte 180
ttcctgggaa acctagcatg tctagacatc tgcttctcca ctgtaacagt gccaaagatt 240
ctagataact tettetecae aageaaagea attteettet tggggtgeat aacteagett 300
tattttttcc accttctggg tagcacagaa gccctgctgc tggccgtgat ggcatttgac 360
cgctttgtgg ctatctgcag accactccac tacccttcca tcatgaaccq tcaggtctgc 420
atccaggtgg ctatctccat ctgggccatt ccttttgttc atgcactggt tcactccata 480
ttgacatete aattgaactt ttgtggttee aaccaaatee ateatttett etgtgatgtt 540
aagccattac tggagctggc ctgtggaaac actgaactca acaggtggct gctcaatact 600
ttcacaggga catttgccat tggcctcttc tttctgacat tcctctctta tttctacatc 660
attacctace tetttetgaa gactegttee tgeageatge tgeacaaage actgteeact 720
tgtgcctctc acttcatggt tgtcatgatt ttttatgctc ctgttctctt catctatatc 780
aatcctgatt cagggagctc cctggaaaag gacaggatca ttgctgtcat gtacactgtg 840
gtcacccctg cactcaatcc acttatctat actctgagga acaaggaagt gagaggtgct 900
ttgaatagga aactcaggat acttctt
<210> 1168
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR256-48
<400> 1168
atgatattgg tcaataaaag tcacccagaa gagtttattc tacttggttt tgcagatcgt 60
cettggctgg aactteetet etttattatt ettetggtaa eataceeeae ageeatgatt 120
ggaaacatcg ccatcattct catgtctata ttagacccct gtctccacag ccccatgtat 180
ttctttctca ccaacctctc ctttctggac atgtgctaca ccacaagcat tgtacctcag 240
atgttaatta acctttgggg ctctacaaag accatcagct acttgaggtg tgtagttcag 300
```

```
ctttatttct tccacacaat gggaggtaca gagtgtgtcc tcctagctct tatgtccttt 360
gaccgatatg tggccatctg caaacccctg cactataccc tcataatgaa tcggcgtaac 420
tgcctcctgt tagtgtccac tgtgtggctg actggaattt cctatgctgt ctcagaggcc 480
actgtaacac tgcaattgcc tctatgtggc cacaataaaa tggatcattt agtgtgtgag 540
attccaattc tgataaaaac tgcttgtggt gaaaaagaga ctaatgagct tgctctctct 600
gtaatatgca tttttctttt agctgtccct ctgtgtttaa ttcttgcctc ctatgctagt 660
attggacatg ctgtctttaa aatcaaatca atagaaggaa ggaaaaaggc ttttgggaca 720
tgttcctctc atctcattgt agttctcttg ttctatggcc caggtattag tatgtatctt 780
cagoctocct cototattac aaaagaccaa cotaagttoa tggototott ctatggagta 840
gtcactccta cactgaaccc cttcatttat actctgagaa ataaggatgt taagggggca 900
ttaggtaacc tattcagaaa catttttatt ccgaag
                                                                  936
<210> 1169
<211> 942
<212> DNA
<213> Mus musculus
<220>
<223> MOR171-42
<400> 1169
atggaggaca tgccagcagg aaaccattgc acagtgactg tgttcttctt agctgggctc 60
tcagagcagt cagaactcca gctgcccctg ttcctcttct tcacaggaat ctatctgatc 120
actgtgtctg ggaatctggg catgattata ctaattgggc tcagttccaa cctgcacaca 180
cccatgtact atttcctcag cagtttgtcc ttcattgact ttggtcagtc cacagttgtt 240
accectaaaa tgetggtgag etttetgaca gagaagaace teateaceta eeetgaatge 300
ttggctcagc tctactttgc catcattttt ggcacagcag agagctacac attagctgca 360
atggcatatg acceptatgt teccatetet aacceptteg tttacaatat agecatetec 420
teteagattt aetgttetet gattteaggg gtataeattt ttgetgtgtt etgtgeatea 480
gtaaacatgg gcttcatgtt taggatccag ttctgcaaat cagatgtaat caaccactat 540
ttctgtgatt tccttcccct cttgaaactt gcatgctcta atacatatgt cagtgaaatg 600
ttgattctat tttttggtac actgaatatc tttgtcccaa tgctgaccat tattacttcc 660
tacateteca ttatttecag cateeteege attageteta gtgagggeag gtecaaagee 720
tttagtactt gcagttccca catctctqct gttqctqtct tctatqqttc tacaqcattt 780
gtqtacttac agccatcacg agtaagttca atagaccaag ggaaagtgtc ctctgtgttt 840
tatacgactg ttgttcccat gctgaacccc ttgatctaca gcctgaggaa taaggatgtc 900
agtgttgcaa tgaagaaaat acttgaaagg aaaagattca tg
                                                                  942
<210> 1170
<211> 937
<212> DNA
<213> Mus musculus
<220>
<223> MOR171-43
<400> 1170
atggaggaca tggcagcagg aaaccagtgc acagtggctg agttcttctt ggctgggctc 60
tcagagaagc cagaactcca gctgccactc ttcctcctct tcacaggaat ctatcactgt 120
agcagggaac ctgggcatga tcacactgat tgggctcagt tcccacttgc acacacccat 180
gtactatttc ctcagcagtc tgtccttcat tgacttctgt cagtccacag ttatcacccc 240
taaaatgttg gtgagctttc tgacagagaa gaacatcatc ttttactctg gatgcatggc 300
tcagctctac ttcttcatca tttttggcgt tgcagagtgc tacacattag ctgcaatggc 360
atatgacege tatgttgeea tetgtaatee ettgetttae agtgtateea tgtettatea 420
gatttacagt tototgattt caggagtgta tatttttgct gtggtttgct ottcagtaat 480
cactggettt atgettagga tteagttetg caagttagat gtgateaace actatttetg 540
tgatcttctt ccactcttga aacttgcacg ctctaatacc tatatcaatg aaatgttgac 600
```

```
attatttgtt agtatgttta atatctgtgt cccagtgatg accattatta cttcctacat 660
tttcattata gccaccattc tcaacattca ctccagggag ggcaagttca aggcttttag 720
tacctgcagt tcacacatct ctgctgttgc cattttctat ggttctggtg cattcatgta 780
cttacaacca tcatcagtga gttcaatgga ccaagggaaa gtgtcctctg tgttttatac 840
tactgttgtt cccatgctga accccttgat ctacagcctg aggaataaag atgtcagtgt 900
tgcattgaag aaaatacttg aaaggaaaaa agtcatg
                                                                  937
<210> 1171
<211> 939
<212> DNA
<213> Mus musculus
<220>
<223> MOR224-9
<400> 1171
atggagataa aaaactgctc agtggtgact gagttcatcc tcctggggat cccacacaca 60
gagggetttg agactetget ttttgtgtta tteetgeect tetatgeetg taccetagtg 120
ggaaatgtat ctatccttgt ggctgttatt tcctcaactc gccttcatac acccatgtat 180
tttttcctgg ggaacttgtc cgtatttgat atgggtttct cttctgtgac ctgtccaaaa 240
atgetetttt acettatggg acttageaga ettateteet aceaagaetg tgteteeeag 300
ctcttcttct ttcattttct tgggagcatt gagtgctttc tgtatacagt gatggcctat 360
gaccgctttg ctgccatttg tcaccctctt cggtactcgg tcatcatgaa ctctaagatc 420
tgtgtggctc tagctgtggg cacatggcta ttaggatgtt tccactccag cgtcttaact 480
teceteacet teaetttgee ttaetgtggt eccaatgaag tagaceaett ettetgtgae 540
ataccaqcca tottgccatt ggcgtctgct gatacctcct tagcacagag agtgagcttc 600
actaatgttg gtctagtgtc ccttgtctgc tttctcctga tccttctgtc ctatacacga 660
atcacaatct ccatcttgag tattcagtca actgaggggc gtcagcgtgc cttctccacc 720
tgcagtgccc acctcattgc tatcctctgt gcctatggac ctataatcac tatataccta 780
cagoctacac caaaccccat gctgggaact gtcgtgcaaa ttctgatgaa cttggtaggt 840
ccaatgctga accetttgat ctatactttg aggaataagg aagtaaagat agccctgaaa 900
aagatactgc atgggaaggg gtcagtttct gagggttag
<210> 1172
<211> 942
<212> DNA
<213> Mus musculus
<220>
<223> MOR13-6
<400> 1172
atgagaacct tgtacagtaa cacctcaagc accttaagct tcatgctgac gggcttccca 60
gagatgcaga gtctggagca ctggctggct gccctcctgc tgctgctgta tgttatctcc 120
atagtaggca atgccctgat tctcttcatc ataaaggagg aacagagttt gcaccatcct 180
atgtactact tcttgtccct tctgtctgtc aacgacctgg gagtgtcttt ttctacattg 240
ccaacqqtqc ttqcttctat qtqttttcat atcccaqaqa ctqccttcqa tqcttqcctq 300
gcccagatgt tottcataca otttttttcc tggacagagt ctgggattct actggctatg 360
agttttgacc ggtacgtggc tatctgtaac cctttgcatt attcctcagt gcttactgat 420
gcccgtgtgg cccacatggg tatgtccatc atcatccgca gtttctgcat ggtcttccca 480
cttectttee tactgaagag getaecette tgtaaggeea atgttetgae eeatteetae 540
tgcttacacc cagacctgat acgcttgccc tgtggagata ccaccatcaa cagcatgtat 600
gggctgttca ttgtcatctc tgcttttggt gtagactcag tgctcatcct cctctcctat 660
gtgctcattc tgcgctctgt gctggccatt gcctccaggg aagaaaggct taagacactc 720
aacacatgtg tatcacatat ctctgctgtg ctcatcttct atgtacccat gattagtgtg 780
tcaatggtcc atagatttgt aaaacatgcg ccagagtatg tgcacaagtt cacatccctg 840
gtctatctct ttgtgcctcc aatgctcaat cctattatct attccatcaa gacaaaggag 900
```

```
attcgtagga gactgcacaa gatgttactg ggtaccaagt to
<210> 1173
<211> 972
<212> DNA
<213> Mus musculus
<220>
<223> MOR34-10P
<400> 1173
ctcattatat cacttctaaa tgccagcagt ctgactccag cttcattcat cctcaatggc 60
atccctggtc tggaagaggt tcatttgtgg atctccttcc cactatttac catgtacagc 120
agacctatgt acatetteet agecettett teetteacag atgtgeteat gtgcaccage 240
accettecea acactetetg catattgtgg tteaatgtea agaagattga etttaaggee 300
tgcctqgctc agatqttctt tgtgcacact ttcacaggaa tggagtctgg agtgctgatg 360
ctcatggcct tggaccgcta tgtggctatc tgttatcctc tgcgctatgc cactattctc 420
actaatgtgg tcattgccaa ggcagggatg cttacttttc ttaggggagt gattcttgtc 480
atccctttca tattccttac caagegectg ccatactgca agggtaatgt catccccac 540
acttactgtg accacatgtc tgttgctaaa atatcctgcg gcaatgttca aatcaatgcc 600
atctatggtc taatggttgc ceteetgatt gggggetttg acateetgtg tateacagte 660
tectacacca tgatectacg ggeagttgtg agtetgteat etgeagatge tegacagaag 720
gettteagea cetgeactge teatatetgt gecategtea teacatatgt eccaqeette 780
ttcaccttct ttacacaccg ctttgggcgg cataccatcc ctccccacat acatatcatc 840
atggctaatc tctatctgct catgccgccc accatgaacc caatagtgta tggggtgaaa 900
accaagcaga tatgagagag tgtcattagg ttcttgttta aagggagaga aaattcttcc 960
cataaaattt aa
                                                                 972
<210> 1174
<211> 951
<212> DNA
<213> Mus musculus
<220>
<223> MOR249-2
<400> 1174
atggaaggaa agaatcaaac agctccatct gaattcatca tcttggggtt cgaccacctg 60
aatgaattgc agtatttact cttcaccatc ttctttctga cctacatatg cactttagga 120
ggcaatgttt ttatcattgt ggtgaccata gctgattccc acctacacac acccatgtat 180
tatttcctag gaaatcttgc ccttattgac atctgctaca ctactactaa tgtcccccag 240
atgatggtgc atcttctgtc agagaagaaa atcatttcct atggaggctg tgtgacccag 300
ctctttgcat tcattttctt tgttggctca gagtgtctcc tcctggcaqc aatgqcatat 360
gatcgatata ttgctatctg taagccgtta aggtactcat ttattatgaa caaggctctg 420
tgcagctggt tagcagcttc atgctggaca ggtgggtttc tcaactcaqt gttqcacacg 480
gttttgacct tccacctgcc cttttgtggt aacaatcaga tcaattattt cttctgtgac 540
atacctccct tgctcatctt gtcttgtggt gatacttccc tcaatgaact ggctttgctg 600
tccattggga tcctcatagg ctggactcct ttcctgtgca tcatcctttc ctacctttac 660
atcatctcca ccatcctgag gatccgttcc tctgagggga ggcacaaagc cttttccacc 720
tgtgcctccc acctgctcat tgttattctc tattatggca gtgctatctt cacgtatgtg 780
aggcccatct catcttactc tctagagaaa gatagattga tctcagtgct gtatagtgtt 840
gtcacaccca tgctgaatcc tgtaatttat acgctaagga ataaggacat caaagaggct 900
atgaaggcca tagggagaaa gtggaagcca ccagttttct cttctgatat a
                                                                951
<210> 1175
```

<211> 990

```
<212> DNA
<213> Mus musculus
<220>
<223> MOR263-9
<400> 1175
atgacttact gttctgtctt ccaggagatg agtgtcaact gctctctgtg gcaggagaac 60
agottgtctg tcaaacqctt tqcatttqcc aaqttctctg aggtccctgg agaatgcttc 120
ctcctqttta ccctcatcct cctcatqttc ttaqtatcac tqacaqqaaa tqcactcata 180
accettgeea tetgeaceag tecageceta caeacteeca tgtaettett tetggeeaac 240
ttgtctctcc tggagattgg ctacacttgt actgtcatac cgaagatgtt gcagagcctt 300
qtqaqtqaqq cccqaqqqat ctctcqqqaq qqatqtqcca cacaqatqtt tttcttcaca 360
ctatttggta taactgagtg ctgcctactg gcagccatgg cctttgaccg ctgcatggcc 420
atatgeteee caeteeacta tacaaceega atgaategtg gggtatgtge ceatttggea 480
atagtttcat ggggaacagg ttgcattgta gggttgggac aaaccaattt tattttctcc 540
ttaaacttct gtggcccctg tgagatagac cacttcttct gtgaccttcc acctgtcctg 600
gcacttgcct gtggagatac atcccaaaat gaggctgcca tctttgtggt agccatcctc 660
tgtatttcta gtccattttt actcatcatt tattcctatg tccgaattct ggttgcagtg 720
ctggtgatgc cttcacccga ggggcgccat aaagctttct ctacctgttc ttcccatcta 780
cttgtagtca cactgttttt tggctcagga tctattaact acttgaggcc caagtctagc 840
cactcaccag gaatggacaa actcttggcc cttttctaca cagcggtgac ttccatgctg 900
aaccccatca tctatagctt aaggaacaag gaagtgaagg cagcactgag aagaactctg 960
ggcctgaaga aagttctgac tatgaatagg
                                                                  990
<210> 1176
<211> 942
<212> DNA
<213> Mus musculus
<220>
<223> MOR171-44
<400> 1176
atggaggaca tgacttcagg aaacaactgc acagtgactg aattcttctt ggctgggctc 60
tcagaggaac cagaactcca gctgccactc ttcctgctct tcacaggaat atatctgatc 120
actgtggcag ggaacctggg catgatcaca ctgattggga tcagttccca cctgcacaca 180
cccatgtatt atttcctcag cagtctctcc ttgattgact tctgtcagtc cacagtggtt 240
attectaaaa tgeteatgag etteetggtg gagaagaace teatttetta eeetggatge 300
atggctcagc tctacttctt catcactttt ggcattgcag agtgctacac attagctgca 360
atggcatatg atcgctatgt tgccatctgt aaccccttgc tttacaatgc aactatgtcc 420
teteagattt ataetteeet gattttaggg gtgtatattt ttgetgtgat etgtgeatet 480
gtaaacacag gcttcatgag taggattaag ttctgcaaat cagatgtgat cagccactat 540
ttctgtgatt ttcttcccct cttgaagctt gcatgttctg atatctatat caatgaaatg 600
ttgattttgt cttttggtac agtgaatate tgtgteceat tgetaaeggt tattaettee 660
tacatettea teattgecag cateeteegt attegeteea gtgagggeag gtetaaagee 720
ttcagtactt gcagttccca catctctgct gttgctgtct tctatggttc tgctgcattc 780
acatacttac agccatcatc agtgagtttg atagaccaag ggaaagtgtc ctctgtgttt 840
tatactactq ttqtacccat qctqaacccc ttqatctaca qcctqaqqaa taaqqatqtt 900
acagttgcac tgaaaaccat acttgaaaga aaaaaattca tg
<210> 1177
<211> 951
<212> DNA
<213> Mus musculus
```

```
<400> 1177
atgtecaett tteataatgt atgtteagta eeeagetett tgtggeteae eggeateeea 60
ggactggaga cettgeacat atggetetee attecetttg getecatgta eetggtgget 120
gtggtgggga acatcaccat cctagctgtg gtaagggtag agcgcagcct gcaccagccc 180
atgtacttct ttctgtgcat gctggctgtc attgacctgg ttctgtctac ttctactatg 240
cccaaacttc tggcgatttt ctggtttggt gctggccaca ttggcctgga tgcctgctta 300
tgccaaatgt ttcttatcca ttgctttgct actgttgagt cgggcatttt ccttgccatg 360
gettttgace getatgtage catetgeaat ceaetgegte acageatggt geteaeteae 420
acattggtgg gtcgtttggg gctggctgcc gtcctcagag gagttcttta cattggaccc 480
ctaccactta tgatccgcct gcggttgcct ctttacaaaa cccgagtcat ctcccattcc 540
tactgtgagc acatggctgt ggttgccttg acctgtggtg acagcagagt taacaatgtc 600
tatggcttga gcattggctt tctggtgttg atcctggatt cagcggccat tgctgcctcc 660
tatgtgatga ttttcagggc tgtgatgggg ctggccactc ccgaggctag acttaaagct 720
ctggggacat gtgggtctca tatctgcgcc attctgattt tctatgttcc cattgctgtt 780
tettetetta tteaceggtt tggteaceag gtteeteete eaateeacae tetgetggee 840
aacttctatc tecteattee ecctateete aateeeattg tetatgetgt tegtaceaag 900
cagatceggg acaggettet teagateeta aagacaggaa ecaagateag a
                                                                  951
<210> 1178
<211> 927
<212> DNA
<213> Mus musculus
<220>
<223> MOR33-3P
<400> 1178
atagaactca acactacacc tactcagctc actttctttc tgcttactgg tgtgccagga 60
ttaqaaqata ttcaqatttq qatqtccata cctttcaqct tcatqtacqt tttqqctqtq 120
ttaggaaatg tgctggtcat ggcagtagtg gtctatgaca ggagcctcca tgaacccatg 180
tatctcttcc tggccatgtt ggcattcaat gatgtcctcc tctgtactgt cacggtaccc 240
caaatgctgc teattttctg geagggeece ttggaageea catteectge atgeetgaca 300
cagatgtttt ttgtccatgc tctgttcctc tctgaatctg ctgtcttact ggctatggct 360
tttgatcgct atgtggctat ctgcattcca ctgcattata catccctgct tacaagctct 420
atcattggca aggttgggct ggtgctgata gctcgaagtg tggctgttgt tactccaggt 480
gttctactta ttctccqctt gqacttttqc cqaaqcaaca ttatccatca cacatactqt 540
gagaacatgg gcattgccaa gttggcttgc aacagcttta ccttaaatag catttatggt 600
ctctcagctg ctcttctcac gacagggctg gactttgtct ttatctcctt gtcctactgg 660
ctaatcttga aaactgttct acaactgcca tcaaaagaag cacggacaaa agcctttggc 720
acctgcggag ctcacatttg cgtcatttta atattctaca cactggcctt tttctctttc 780
tttacccatc gctttgggca ccatgtgtcc aggcacactc tcatcctcct ggcaaatctc 840
tatctactga tacccccaac catgaacccc attgtttatg gaataaagac caaagagata 900
aggatgcgag tagtaggaac ctgttct
                                                                  927
<210> 1179
<211> 987
<212> DNA
<213> Mus musculus
<220>
<223> MOR108-4
<400> 1179
atgttgattt tatcagttag atttcttgta gacaaaccat cagagatgag gaacagaact 60
```

```
tcagtgacat acttcatcct cctgggtctg acagacgatc ctgagcttca ggttgtgatt 120
ttcttttttc tgtttctcac ttacttgctg agcattactg gaaatttaac catcattact 180
ctcacactgt tggattccca cctgaagaca cccatgtatt tcttcctcag gaatttctcc 240
ttcttagaaa tctcatttac ttctgtctgt aatcctaggt ttttggtcag catcttaact 300
aaggacaaat cgatctccta taatgcttgt gctgcccaac tatttttctt tatcttcctt 360
ggctcaacag agtttttcct tctggcatcc atgtcctatg atcgctatgt ggctatttgc 420
aagcetetge actatacgae cateateagt aacaagatet geeaceaget cateateage 480
tcctggctgg ctggtttctt ggtagttttt cctccactgg ccatgggctt agatctaqat 540
ttctgtgact ccaacactat tgaccacttc acatgtgact ctgctccttt gctgcaaata 600
tcctgcacag acacaagcac cttggagctt atgagcttta tattagcttt gatcacactt 660
atgaccacqc tgatgctgat aattctctct tacacctgta ttctcagaac tattctgaaa 720
tttccctcag ccaaacaaag ggaaaaggcc ttctcaacct gctcctcaca catgattgtt 780
gtctctatat cctatggaag ctgcatcttc atgtatgtga aaacatctgc caaggctgga 840
gttgctttaa caaagggggt ggctatgctc aacacctctg ttgctcccat gctgaatcct 900
tttatttaca ctttaaggaa ccagcaggtg aaacaagcat ttaaggatct cgtgcgaaaa 960
aaacttgctt caaaactgct gatctga
<210> 1180
<211> 933
<212> DNA
<213> Mus musculus
<220>
<223> MOR233-18
<400> 1180
atgcaaaacc agagttttgt aactgaattt gtcttcctgg gactttccca gaatccaaat 60
cttcaaaaac taatatttat tatatqtcta qttqtttaca ttqcaactat qqqqaqcaac 120
atgatgattq tggtgactgt tgtctgtagc cctacactgc tgggctctcc catgtatttc 180
ttcctqqctt ttctqtcttt attqqatqca aqcttctcct ctqccatqac acccaaqatg 240
attttagact ctctctacaa gagaaaaacc atctcctttg aaggatgcat gatacaactt 300
tttqttqaac acttcttqqq tqqqqctqaq atqattcttc tqacaqccat qqcctatqac 360
cgctatgttg ctatttgtaa gcccttacac tactcttcca tcatgaccag gaaggtctgt 420
ggcacgctqq tgggggtggc ctgggcagga ggattgttac attctactgt gcaaattatc 480
ttcactttqc aqttaccatt ttqtqqaccc aatqtcatta atcatttcat qtqcqactta 540
tttccattac tggagcttgc ctgcaccgac actcacatct ttggcctttt tgtggtggcc 600
aacagtgggt tgatctgtat tatagtcttt gttttgttgc ttgtctccta tggctttatc 660
ttqctqtctt tqaqatccca qaqttctqaa qqqcqatqqa aaqctctqtc tacttqtqqq 720
teccaegtty etgttgtggt ettgttettt gteccatgta tatttatata tgcaaggeet 780
cacagtgett teteetttga caaaatggta geattatttt acaccatget atececettg 840
cttaatccta tcatttacac ttttaggaat aaggacatga aaaatgccat aaggaaattg 900
tggaagaaat tggtaatggt ttcagatgaa aga
                                                                   933
<210> 1181
<211> 914
<212> DNA
<213> Mus musculus
<220>
<223> MOR233-19
<221> variation
<222> (36)...(73)
<223> Any nucleotide A, C, G or T
<400> 1181
atgcaaaacc agagttttat aacggaattt gtcttnnnnn nnnnnnnnn nnnnnnnnn 60
```

```
nnnnnnnnn nnntgtctac attgcaacta ttgggggcaa tatgatgatt gtggtgactg 120
ttgtttgtac tccggcactg ctcggctcac ccatgtattt cttcctggcc ttcttgtctc 180
tattggatgc aagettetee tetgeeatga cacceaaaat gattgtagat tetetetatg 240
agagaaaaac catctccttt gaaggatgca tgatacaact ttttgctgaa catttctttg 300
gaggggctga ggtgattgtc ctgtcagcca tggcctatga ccgctatgtt gctatttgca 360
agcccttgca ctactcttcc atcatgaccc tgaggctctg tggtactcta gtgggagtgg 420
cctggacagg aggattetta caetetatea tecaaattat etteaetttg cagetgeett 480
tctgtggacc caatatcatt gatcacttca tatgtgactt gtacccatta ctggaacttg 540
cttgcactga cactcacatc tttggccttt tggtggttgc caacagtggc tttatctgca 600
tcataatctt cactttqttq cttqtctctt atqqttttat cttqctqtct ctqaqatctc 660
atagttetga aggacgatgg aaagetetat ceaettgtgg ateceatatt getgttgtgg 720
tettgttett tgtteeatge atatttaeat atgeaaggee teceaetgee tttteetttg 780
acaaaatggt agcaatattt tacaccatgc tatccccctt gcttaatcct atgatttata 840
cttttaggaa taaggacatg aaaaatgcca taaggaaaat gtggacgaga ttgatagtac 900
attcagataa aaaa
                                                                  914
<210> 1182
<211> 939
<212> DNA
<213> Mus musculus
<220>
<223> MOR133-5P
<400> 1182
atgggaagag agaaccagac aagcaccttt gagttcctcc tctggggact ctcagagcag 60
ctacagcaac aacacatcct cttcctgatc ttcctgtgga tgtaccttgt cacagtagtt 120
gggaatctgc tcattgtcct ggccattagc actgatgtac gactccacac acccatgtac 180
ttcttgcttg ccaacctgtc ctgtgatgat atcctcttca cctccaccac aatacccaag 240
geoctagtga acatecaeae eeaaageagg accateteet atgeaggatg cetggteeag 300
ctctattttt tcctgacttt tggagacatg gacatcttcc tcctggccac aatggcctat 360
gategetttg tggctatttg teaceetete caetatagga tgateatgag ettecagege 420
tgctcactct tagtgacage ctgttggate cttacaacct ttgttgctat gacacacace 480
ttgctcatat tccggctctc cttctgctct aagaaggtca ttccagactt cttctgtgac 540
ctgggacccc taatgaagat cgcttgctct gaaacccgga tcaatgagct tgtgcttctc 600
ttcctgggag gtgcagtcat cttaatcccc ttcttgctca tccttgtgtc ttatatccgc 660
attgtttcag ccatcctcag gctcccttct gcccaaggaa ggcgtaaggc cttttctacc 720
tgtgggtccc acctttctgt ggtggccctg tgctttggga cagtgataaa ggcttatcta 780
tgtccctcat cctcttcctc caactcagtg gtagaggata cagcagctgt tgtcatgtat 840
acagtggtga ctcccctact gaaccccttc atttacagcc tgtgaaacaa agacatgaag 900
ggagcactgg tcagaattct caagggcaaa gtctccttc
                                                                  939
<210> 1183
<211> 924
<212> DNA
<213> Mus musculus
<220>
<223> MOR183-8
<400> 1183
atggagaaga atgccaccct gctgacagag tttgttctca caggactcag tcaccagcca 60
ctgtggaaca tccctctgtt cctggtcttc ttggtgatct atctcatcac cattgtggga 120
aacgtcagtt tgatcactct catctggact gaccctcacc tccatatccc catgtatctg 180
tttcttggaa gcttggcttt tgtagataca tctatttctt ccatagtggt cccaaagatg 240
cttcttaact tctttggtaa gagcaaggtg atcactctct ctgaatgtat ggcacaattt 300
```

```
tttttattta atatcagtgc aaccacagag tgtttcctct tggcagcgat ggcctatgat 360
cgctatgtag ccatatgcaa acctttactc tacccagtag ttatgaccaa tggtctgtgt 420
gtatggctaa tagccttgtc ttttgttgct ggaattattc atgctttgat tcatgaaggt 480
tttttattga gattaacctt ctgtaattcc aacatgatac ataactttta ttgtgacatt 540
atatcattgt taaagatttc ctgtactgac acttctctta attacctaat tgtttttatt 600
ttctctggct cgatccaggt tttcactatt tcaactatcc ttgtctctta cactattatt 660
ttgtttacaa tcttaaaaaa gaaatctgcc aaaggcataa agaaagcctt ctccacctgt 720
ggggcccatc tcctatccgt gtctttatac tatgggcccc ttctcttcat gtatgtgcac 780
cctgcatctt cagaagtaga tgatcaagac atgatagact ctctgtttta cactgtcata 840
attcctgtgt taaatccaat tatttacagt ttgagaaata agcaagttat agattcactg 900
gcaaaatttt taaagagaaa tgtt
                                                                   924
<210> 1184
<211> 927
<212> DNA
<213> Mus musculus
<220>
<223> MOR183-9
<400> 1184
atggaagacg ggaatacaac attgctgaca gagtttgttc tcacagggct cacagatcat 60
caagggctgc aggtgcccct gttcctacta ttcttgatga tatatctcat cactgttgtg 120
gggaacctag gtctgattgc tctcatctgg agtgaccccc acctgcatat ccctatgtac 180
cttttccttg ggagtttggc ttttgtagat gcctggatat catccgcagt gactcctaat 240
atgttgtttg acttgttatc caagaacaag atgatatcac tttccgagtg catgatacaa 300
ttttttgcct tcgcatttgg cgggaccaca gaatgctttc ttttgggtac aatggcctat 360
gategetatg tagecatatg caaaccatta etttateeag ttattatgae caatagaeta 420
tgcatccgcc tactagtttc agtattcata ggtggctttc ttcattcctt gtttcatgta 480
ttgtttttac tcagattaac cttctgtaat tctaacataa tccatcactt ttattgtgat 540
attataccat tgtataatat ttcctgtact gatcctactc ttaatctcct attagtattt 600
attitiquet quitcaataca qqtattcacc attatqactq ttctqqtttc atatacactc 660
gtactgttca caattttaaa aatgaagtct ctccaaggta taaggaaggc cttctccacc 720
tgtggagccc atctcttatc tgtgtcttta tactatgggc cccttctctt catgtatgtg 780
cttcctqcat ctcaacaaac agatqqtcaa qqtatqatqq actctctqtt ttacacqqtc 840
ataatteetg tgetaaacce aattatetae ageetgagaa acaageaggt cacagattea 900
                                                                   927
ctgaaaaaaa gattagagag gcatgtt
<210> 1185
<211> 978
<212> DNA
<213> Mus musculus
<220>
<223> MOR264-19
<400> 1185
atgactcaga ctccgactaa atcctttcta cagatgaaac atgatgaaat tgaggcagaa 60
qtcaacattt ctacaqtqat acaatttqtt ctqctqqqat tctctqctct tcccaatctc 120
caagggatte tgtetgeact gtteteeate atttatatga ttateeteae eggeaattge 180
ctcattatat taataactag gcttgaccat acattgcata aacccatgta tttttttctg 240
gcaaattttt cctctctgga aatctgttat gtatcagtga ctgtcccaag aattcttttc 300
aacatttgga cacaggatag aaacatttct gtgctggctt gtgctgtgca gatgtgtttt 360
tttcttatgt tgggaactga tgaatgtttc cttctggctg tgatgtccta tgatcgctat 420
gtggccattt gcaaccettt gcactateet ttgateatga acteaaaaaa gtgcaeteag 480
ttggcagcag gctcctggct aagtggcatt ccaattcaga ttggacaaac ctgttggata 540
ttttctatgc atttctgtga ttccaatgaa atagaccact tcttttgtga cataccacca 600
```

```
attotcaago tggcatgtgg ggacacttca gtgcatgaat tgtctgtcta tgtggttgtt 660
atggtggtgg ctgcattccc ctttatactg gtgcttacat cctacagcaa aatcattgcc 720
accatettga ggttgccaae agccaaaggg egggcaaaag cettetecae ttgttettee 780
cacctcctgg tggtggtttt gttttatggg tctggcacca ttacatactt gaggccaaag 840
totacgcatt cocctggaat tgataaattg ctgtctctgt tctataccat tgtgactccc 900
atgttcaatc ccttaatata cagccttagg aacaaggagg tggttgttgc tctaagaaaa 960
ctcatactcc aaaaatag
                                                                  978
<210> 1186
<211> 855
<212> DNA
<213> Mus musculus
<220>
<223> MOR204-33P
<400> 1186
atggageetg ggaaceacae aatggtaaca gagtteatta ttttgggget aactgagaae 60
cccaccettt gttgtatett etttgtgttg tteetgggtg tetaceteae caccatattg 120
ggcaatgtca gcataatcat gttgatcaga agaagccctc agcttcacac cccaatgtac 180
ctcttcctta gccacttggc ctttgtggac attgggtact ccagctcagt cacacctgtc 240
atgattgtga gtttcctgag agagagaact gccatccctg tggctggctg catagtccag 300
cttggctctg atgtggtctt tgggactgct gagtgcttcc tgttggctgc catggcctat 360
gategetatg tagecatetg etcaecectg etctaeteca etcteatgte teceaaggte 420
tgcctcatct tattggttat ttcctatgtg ggtggatgtg taaattcttc atcattcacc 480
agctgtttgc tgagtctgac tttttgtgga ccaaataaag tcaaccattt cttctgtgac 540
ctcccaccac tggtggagct gtcctgtacc catgtttatg ttgctgaaat gtctcctgcc 600
atctcagcag gctccatcat cqtcatcacc ctqttcqtaa tcattatttc atatgtctac 660
atcetteact ceatecteag gatgegetet actgagggea ggeacaagge etteteeace 720
tgcacctccc acctcactgc agtcaccttg ttttatggga cagttacatt tgtttatgtc 780
ataccagaat caagccattc accaaacaaa attaaagtgg tgtctgtgtt ctacacagtg 840
                                                                  855
gtgatcccca tgctg
<210> 1187
<211> 939
<212> DNA
<213> Mus musculus
<220>
<223> MOR110-9
<400> 1187
atgaagaacc aatcagtgaa gatagagttc attttgcttg gactgacaga tgaccctcag 60
ctacaaattc ttgttttcct gtttctgttt tttaattaca tcttaagtgt gatgggaaac 120
ttagtgatca tacttctcac cctgctggat ccccatctca agactccaat gtatttcttt 180
cttcggaatt tctctttctt agaaattgcg ttcactacag tgtgcattcc caggttcctt 240
atgagcattc tctcaggaga cagaacaatt tcctacaatg cttgtgcagc tcaattattc 300
ttttttttttt tactaggggc cacagagttc tacctcctgg ctgccatgtc ctatgatcgc 360
tatgtageta tetgeagace actgeactae eccateatea tgaatageaa agtgtgeeac 420
ettetggtee teagetgetg ggtgaetggg ttettagtea tettteecee tttgetettg 480
ggactcaaac tggatttctg tgcctccaaa acaatagacc acttcctatg tgacacttcc 540
cctgttctgc agctgtcttg cacaqacaca catttcatag aattgatggc ttttgcctta 600
gctgtcatga cacttgtcat taccttgate ttagtgatte tetectacat acteateate 660
aaaaccattc taaagttccc ttcagctcaa cagaggagaa aggccttttc tacttgttcc 720
teceacatgg ttgttgtete cattaettat gggagttgta tetteatgta tatgaaaaca 780
tcagccaagg agagggtgac cttaaataaa ggtgtagctg tgcttaatac tgttattaaa 840
cgcgttctca cgcccggcca ggaagaacac aacaaaccag aatcttctgc ggcaaagctt 900
```

```
<210> 1188
<211> 972
<212> DNA
<213> Mus musculus
<220>
<223> MOR246-2
<400> 1188
atqaatqaaa caaattactc tcqtqtqaca qaqtttqtqc tqttqqqtct qtctaqttca 60
aaggagetee ageettteet gttteteata tttteactge tgtacetage aatactgetg 120
ggcaactttc tcatcatcct cacagtgact tcagacccac gacttcatac acccatgtac 180
ttcctgcttg caaacctatc ttttatagat atgtgtgtag cctcttttgc tacccccaaa 240
atgettgetg actttetggt tgaacgaaaa acaatatett ttgaageetg ettggeteag 300
attitettig ticatetett tactggtggt gaaatggtae tictigtate catggeetat 360
gategetatg ttgcaatatg caageetete cactacatga caateatgag tegeogtgta 420
tgtatcattc tcgtctgcat ttcctggttt gtgggtttca tccatacaac tagtcagttg 480
qcattcactg ttaacttgcc attttgtggt cctaacaaag tagacagttt tttctgtgat 540
ctcctactgg tgaccaagct agcttgcata gacacttatg ttgtgagctt gctaatagtt 600
gcagatagtg gatttctatc catgagttca tttctcctct tggttgtctc ctacactgtg 660
atteteatta etgttaggaa tegtteetet getageatgg ecaaggeteg atecaeeeta 720
actgctcaca tcactgtagt tgtactattt tttggaccat gcatcttcat ctatgtgtgg 780
ccctttagca gctattcagt tgacaaagtc cttgctgtgt tctacaccat cttcacaccc 840
attttaaacc cagttatcta cactctgaga aacaaagagg tgaaagcagc aatgtcaaag 900
ctgaggggtc gctatctgaa acctggacag gtttctgcat tgataagaaa tgttcttttc 960
ctggaaacaa ag
                                                                  972
<210> 1189
<211> 927
<212> DNA
<213> Mus musculus
<220>
<223> MOR115-4
<400> 1189
atgaaaaata aaacttcatt gactgaattc atcettctag gactcacgga tgtccctgaa 60
cttcaggtgg cagttttcac ttttcttctt cttgcctatg tattcagcat gattggaaac 120
ctgaccatcc tcgtcctcac cctgctggat tcgcaccttc acactcccat gtatttcttc 180
ctccggaact tctccttcct agaaatttct ttcacaaaca tcttcatccc cagggtcctg 240
gtcagcatta caacgggaaa caagagtatt agctttgctg gctgctttgc tcagtatttc 300
tttgccatct ttcttggagc aacagagttt tatctcctgg ctgctatgtc ctatgatcgc 360
tatgtggcca tatgcaaacc cctgcactac atggcaatca tgagcaacag agtctgtacc 420
catctggttc tctgctcttg gctaggtggg ttgatggcca ttatacctcc catcactttg 480
atgagtcagc agaacttctg tgcatccaac aggctaaatc attattctg tgactttgag 540
cctcttctag aactctcctg ttctgacaca agcctcattg aaaaagttgt ctttcttgtg 600
gcatctgtga ccctggtggt gactctaatg ctggtaactc tctcctatac attcatcatc 660
aagacaatte teaageteee tteageceag caaaggacaa aggettttte caegtgttet 720
teceacatga tigteatete ectetettat gggagetget tetteatgta tgttaageet 780
tcagcaaaag tagggggcac attcgataaa ggagtagccc ttctcattac ttcagttgct 840
cctttattga atcccttcat ttatacctta aggaaccaac aggtgaagca agcattcaaa 900
gatacagtca aaaagcttgt gaatctt
                                                                   927
```

```
<211> 963
<212> DNA
<213> Mus musculus
<220>
<223> MOR246-3
<400> 1190
atgaatgaaa gaaattactc tcatgtgaca gagtttgtgc tgttgggtct gtctagttca 60
aaggagetee ageettteet gttteteata tttteactge tgtacetage aataetgetg 120
ggcaacttcc tcatcatcct cacagtgact tcagacccac gacttcatac ccccatgtac 180
ttcctgcttq caaacctatc ttttatagat atqtqtqtaq cctcttttqc tacccctaaa 240
atgettgetg aetttetggt tgaacgaaaa actatatett ttaaageetg ettggeteag 300
attttctgta tccatctatt tggtggtggt gagatggtac ttcttgtatc catggcctat 360
gategetatg ttgcaatatg caageeecte cactacatga caatcatgag tegeegtgtg 420
tgtatcactc tggtcatcat gccctggttt gtgggtttca tccatacaac tagtcagttg 480
qcattcactq ttaacttqcc attttqtqqt cctaaccaqq tqqacaqttt tttctqtqat 540
cttccactgg tgaccaagct agcttgcaca gacacttatt ttgtcagctt actaatagtt 600
gcagacagtg gagttctcac cctgagtaca tttgtcttct tggtcatctc ctacactgtg 660
gttttaatta etgttaggaa tegeteetet getageatgg eeaaggeeeg ateeaceeta 720
actgctcaca ttattgtagt tgtacttttc tttggaccat gcattttcgt ttatgcatgt 780
cccttaaatg gctcttcagt tgacaaagta cttgctgtgt tctacaccat cttcacgccc 840
attttaaacc cacttatcta cactctgaga aacaaagaca tgaaagcagc tatgtcaaag 900
ctgaggggtc agtatatgaa acccaggcag gtttttgaac tggtaagaaa tgttctcttt 960
ctq
<210> 1191
<211> 963
<212> DNA
<213> Mus musculus
<220>
<223> MOR246-4
<400> 1191
atgaatgaaa gaaattactc tcgtgtgaca gagtttgtgc tgttgggtct gtctagttca 60
aaggagetee ageettteet gttteteata tttteaetgt tgtatetage aataetgetg 120
ggcaacttcc tcatcatcct cacagtgact tcagacccac gacttcatac acccatgtac 180
ttcctgcttq caaacctatc ttttatagat atgtgtgtag cctcttttgc taccccaaa 240
atgettgetg aetttetggt tgaacgaaaa acaatatett ttgaageetg ettggeteag 300
attitictgtg tecateaatt tgetggtggt gaaatggtae tiettgtate eatggeetat 360
gategetatg ttgcaatatg taageeeete cactacatga egateatgag tegeegtgtg 420
tgtatcactc tggtcatcat cccctggttt gtgggtttca tccatacaat gagtcagttg 480
gcattcactg ttaacttgcc attttgtggt cctaaccagg tggacagttt tttctgtgat 540
ctcccactgg tgaccaagct agcttgcaca gacacttatt ttgtcagctt actaatagtt 600
gcagacagtg gagtteteac cetgagtaca tttgtettet tggteatete etacaetgtg 660
atteteatta etgttaggaa tegtteetet getageatgg eeaaggeeeg ateeaceeta 720
actgctcaca tcactgtagt tgtactattc tttggaccat gcatttttat ctatgcatgg 780
ccctttaatg gctattcagt tgacaaagtc cttgctgtgt tctacaccat cttcacacct 840
attttaaacc cacttatcta cactctgaga aacaaagagg tgaaagcagc tatgtcaaag 900
ctgaggggtc gctatctgaa gcctggacaa gtttctgaat taataagaaa tgttcttttt 960
atg
                                                                  963
<210> 1192
<211> 948
<212> DNA
<213> Mus musculus
```

```
<220>
<223> MOR278-2
<400> 1192
atggacagag ggaacaccac agcgggcttc gtcctcctag gactctttaa ccacaccagg 60
geceaettat teetetttgt gttggttetg aetgtggeet teaactetgt ggtaggeaae 120
geoeteetge tteteettat teaccaggae egeeggetee acacacecat gtaetttete 180
ctgagccaac teteceteat ggacatgatg etggteteca eagtagtgee teaaatggea 240
gctggctatt taatgggtaa gaagttcatc tctgccgctg gctgtggctt ccaqatcttc 300
ttetteetea egetgggagg tggagagtge tteetettag eagceatgte etatgaeege 360
tatgtggcta tatgccaccc attgcgctat ccggttctca tgagctggca gttatgtttg 420
agactaaccg tggcgtcttg gctcctggga gcagctgatg gagccatgca agctgctgcc 480
accetgaget tecagttttg cageeggaat gaaatagate aettettetg tgaggeeeet 540
gtgttattgc gcttggcttg cggagacaca tcaqcctttg agtttttcat gtacatttgc 600
tgtgtgttga tgcttctgat ccccttctcc ctcatcctga tgtcctatgg tctcatcctg 660
geogetytee teegaatgeg gteeacagaa geoegeaaga aageettege cacetgetee 720
tegeactigg eggtagtggg cetetittae ggageggeta ettitageta eatgaggeee 780
acatecteca ggteagegaa eeaegataag gtagtgteag eattetatae tategteace 840
cccatgctga accccctcat ctacagtctt cggaacagtg aagtcaaggg tagcctgagg 900
aagtgcgtga cccgctgtgc tgccctaact agtaaggatg ccttggct
<210> 1193
<211> 948
<212> DNA
<213> Mus musculus
<220>
<223> MOR258-5
<400> 1193
atgcaggact teetetggag aaacegcage tetettaceg agtttgteet tetaggatte 60
totagtaaca cacagataaa tggcattotg tttggcatct ttcttctcct ctacctcacc 120
accetectag geaatggget cattateace ttgatacaca tggatteecg cetecacaca 180
cccatgtact ttttcctcag tgtcttatcc attctggata tgggctatgt caccaccaca 240
gtgccccaga tgctggtaca tctggtctgt aagaagaaga ccatatccta tgttggatgt 300
gtggctcaga tgtacatctt cctgatgctg ggaatcaccg agtcttggct gtttgcaatc 360
atggcctatg ataggtatgt ggccatttgc catcccctca gatacaaagt catcatgagt 420
cetttgetge gtgggtcaet ggtageette tgtgggttet ggggtateae etgtgeeetg 480
atatatactg tttctgctat gattcttccc tattgtggcc ccaatgagat caaccacttc 540
ttctgtgaag tgcctgctgt cctgaagttg gcttgtgcag acacctctct caatgaccag 600
gtagactica tectaggett tateettett tiggteecae teteceteat catigitigte 660
tacatcaata tetttgetge tatettgaga ateegtteaa eteaagggag gateaaggee 720
ttctccacct gtgtgtccca catcactgtg gttaccatgt tttccatccc gtgtatggtt 780
atgtatatga ggcctggctc tgagtcctcc ccagaagagg acaagaagtt ggctctcttc 840
tacaacqtca tctctqcctt cctcaacccc atcatctaca gccttcqtaa taaaqatqtq 900
aaaagggctt tcctcaaggt agtgggcagc agaaaagggt cagagtga
                                                                   948
<210> 1194
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR200-1
<400> 1194
```

```
atgacgagaa acttcacctc tgtgactgaa ttcatcctcc tgggtctcac tagccatgtq 60
gagetteaaa ttetettttt tgtgttgttt etagtggtat atgtggteae agttgeagge 120
aacctgggca tgatcctgct catcaaggcc aatgccaggc tccacacacc catgtacttt 180
ttcttgagcc acttatcctt tgtggatatg tgcttctctt ccaatgtgac cccaaagatg 240
ctccagattt tcctgtcaga gaggaaaact atttcctact ctgcatgctt ggtccaatgt 300
tacctcttca ttgcattggt acatgttgaa ttctacatcc tggctctgat ggcctttgat 360
cgttacatgg ccatctgcaa ccctctgctt tatggtagca agatgtccca gagtgtatgc 420
acatetetaa teacagtgee ttatgtgtat ggggeaetta etggtetgat ggagaceatg 480
tggacttaca acctggcttt ctgtggccac aatgaaatca atcacttcta ttgtgctgat 540
ccaccattga ttaagetgge ttgttetgae acttateaca aagaaacete catgettgtt 600
gtagetggat ttaacetete etteteeetg etcattatte teactteeta eetgtatate 660
tttcctqcta ttctqaqqat taqctctaca qaaqqcaaqc qqaaaqcttt ctccacctqt 720
ggctcccatc tgacagctgt catcatattc tatgcaactc tttttttcat gtatctcaga 780
ccaacatcta gagagtctgt ggaacaaggt aaaatggttg ctgtgttcta taccactgtc 840
attoccatgt tgaaccccat gatttacagc ctgaggaaca aagatgtgaa agaagcaata 900
agcaaggaac tgtcacacaa aaaaatgtat ttttct
<210> 1195
<211> 894
<212> DNA
<213> Mus musculus
<220>
<223> MOR213-9
<400> 1195
ctcttgggat tcacctctga ccctaccaca caattggtcc tgtttgtgat gtttctcatt 60
atgtacacat tgagtgtgtt aggaaacatt actcttattg tgttgatctg caatgactcc 120
aggeteeaca cacceatgta tttetteatt ggaaatetgt ettttetgga tetetggttg 180
tctaatqtct atacqccaaa qatcttaqcc atatqtatct ctqaaaataa qaqcatatcc 240
tttgctagct gtgtggctca gttcttcttc tctgcgggac tggactacag tgagtgttac 300
ctgctggcgg ctatggctta tgaccgctat gtggccatct caaagccact gatttattct 360
caggicattt ctatgaaatt atgtgcattt tttgtagcag cgtcttatat gggtggcttt 420
attaactctt ccatcatcac caaqaaaacg tttacctttg atttctgtaa tgacaatgtc 480
attgatgact ttttttgtga cttgcttcct ttggtgaatc tggcttgtgg tggcaaggaa 540
ggataccagg cccttatgta cttcctactg acctccaatg taatgatacc cattgctcta 600
atcctagect cetatatttt cataattgee actatettga gaateegtte caeceagggt 660
cgcatgaagg cettetetae etgtteetee caceteatet etgtgaettt gtactatgge 720
tocattotot acatotacto togtococqt accaqatatt otttagatto agacaaagtt 780
gtttcaacat tttacacagt agttttcccc atgttgaatc ccttcatcta cagcctgagg 840
aataaggatg tgaaagaggc tatgaataaa cttttcaaga tcattccttt gtga
<210> 1196
<211> 942
<212> DNA
<213> Mus musculus
<220>
<223> MOR24-3
<400> 1196
atggggccag ctaataagtc gcaactctct ccaagcacct tctggctgat gggcatccca 60
ggcctagaac accttcatgt gtggattggg attcccttct gttccatgta catggtggcc 120
ctgatgggga atgtgactat cctggccgtg gtgagagcag agcgcaccct ccacgagccc 180
atgitectet tettgigeat getgietgie actgaeetgg teeteteeae atecacatig 240
ccacqcatqc tctqtctctt ctqqatqqca qctcatqata ttaccttcqa cqcatqcctt 300
gctcaaatgt tcttcatcca cagtttcact gccatggaat ctggcttctt cttggccatg 360
```

```
gccattgatc gctatgtggc catctgtgac ccactgcgcc atgccacaat tctcacccac 420
ageogeateg cegtgatggg ageagttgtg gtgctgcgtg gggtaggett etteteecea 480
caccetatee tgettaagea getgeeetae tgeagaacte gaateattge acacacetae 540
tgtgagttca tggctgtggt qaagctggca tgtttggaga taggagccac caagcgttac 600
agcettggtg ttgettttgg categgetee tgtgattgtt tetteattge cateteetat 660
gttctgatcc tccgtgctgt cttccggctc ccatcccgag aagcaagtct taaagctcta 720
ggcacttgtg gctcacatgt ctgtgtcatt gttgtgttct actccacagc tgggtttacc 780
ttcctgaccc accgttttgg ccacagtgtg gccccccgaa ctcatattct catagccaat 840
atgtatttat tggttccacc atttcttaac cccattgttt atggtgttag gaccaagaaa 900
attcgagatt atgttcttaa tactctaaaa gtaaaaggca gc
                                                                  942
<210> 1197
<211> 930
<212> DNA
<213> Mus musculus
<220>
<223> MOR161-6
<400> 1197
atggccactg aaaatgcctc tgtgccagag ttcatcctcg caggcctgac agaccagcca 60
ggacteegea tgeecetett etttetgttt etaggttet acatggteae catggtggga 120
aacctgggct tgatcaccct gattggactg aactctcacc tgcacacccc tatgtacttt 180
ttcctcttca acttgtccct tatagatttc tgctactcca ctgttattac tcccaaaatg 240
ctqqtqaqct ttqtctcaaa qaaaaacatc atctcctact ctqqatqcat qacccaqctc 300
ttcttttttc ttttctttgt tgtctctgag tccttcatcc tatcagcaat ggcatatgac 360
aggtatgttg ccatctgtaa tcctctgatg tacaccgtga ccatgtctcc ccaggtgtgc 420
ttactccttt tgctaggtgt gtatgtgatg ggatttgctg gagccatggc ccacacagca 480
ttcatggtga aactgacctt ctgtgctgac aagcttgtca atcactacat gtgtgacatt 540
ctccctcttc tggaacgctc ttgcaccagc acctatgtaa atgagctggt agtcttcatt 600
gttgtgggca ttgatatagg ggtacccaca gtcaccatct ttatttctta tgccctcatc 660
ctctccagta tccttcgcat cagttccaca gagggcaggt ccaaggcctt cagcacctgc 720
agctcccaca taattgcagt ttctctcttt tttggatcag gggcattcat gtatctcaaa 780
ccttcttccc ttttgcctat gaaccagggg aaagtgtcgt ccttgtttta tacaattgtg 840
gtgcccatgc tcaacccatt aatctatagc ttaaggaata aggatgtcaa agttgctctg 900
agaaaaacat tgagcagaag ttcattttcc
                                                                  930
<210> 1198
<211> 942
<212> DNA
<213> Mus musculus
<220>
<223> MOR40-12
<400> 1198
atgttccaga ttctcagaga ttccagcagc tctaggttcc aggtgtctga gttcattctc 60
atgggatttc caggtatcca cagctggcaa cactggctct ccctccccct ggctctgctc 120
tatgtcttgg ctctcattgc caacatactt attgtgactt tcatttacca agaggcatca 180
ctacaccage ctatgtacca tttcctggge attcttgcta ttgtggacat gggtctggca 240
actactatea tgcccaagat tttagccate ttatggttca atgctaagge tateagttte 300
aatgagtgct ttgctcagat gtatgccatc cattgctttg ttgccatgga gtcagacatc 360
tttgtctgca tggctataga taggtatgtg gcaattcgca qaccactgag atattcttca 420
atagttactg aatcttttgt ggtcaaagca actgtgataa tggccttcag aaattttgtg 480
gctcccatgt cagtacctgt gttggctgct cagagaaatt actgttcccg gaatcaaatc 540
aaccactgtt tttgtcctaa cccgggggtc actagccttg cctgtgatga caggaagatc 600
```

```
gacagcatta accagctett cetggeatgg geagteatgg gtagtgacet tggtttaatt 660
atagtttctt atgctttgat tcttccgtct gtgcttaggc tgaactcccc aaaagctgca 720
teteaaacet taagtaeetg taetteteae eteateetaa tetttttett etaeaetgtt 780
atcattgtca tgcccatcac ccacagtgca aaaatgacag ttcctgtcat cctacttctg 840
ctgaatgtgc cgcacaatgt tattccccct gctctgaacc ccatggtgta tgctcttaag 900
aacaaagagc tcaaagaagg cttttacctg tgctcaggct gg
                                                                  942
<210> 1199
<211> 960
<212> DNA
<213> Mus musculus
<220>
<223> MOR40-13
<400> 1199
atgtctgcgt ctctcaaagc cttcaatagt tccaagtccc aggtgtctga gttcatcctg 60
ctaggattcc caggcattca cagctggcag cattggctct ccctaccatt tactttgctc 120
tacctttcag caatagggac aaacgtgctc attctcatca tcatctgtca ggatccttct 180
ctgaagcagc ccatgtacct tttcttaggt atcctctctg tggtggacat gggccttgcc 240
accaccatca tgcctaagat cctggccatc ttctggtttg atgccaaggt cattagcctt 300
cctgagtgtt ttgctcagat ctatgccatt cactgctttg taggcatgga gtccggtatc 360
ttcctctgca tggcttttga cagatatgta gctatttgct atcctctccg ctattcatca 420
attattacca actccttgat cttaaaagcc acactgttta tggtgctgag aaatggcttg 480
tgtgtcattc cagtgcctgt gcttgcagcc cagcggaatt attgttcaag aaatgaaatc 540
gatcattgcc tgtgctcaaa ccttggagtc acaagcctgg catgtgatga taggaggcca 600
aatagcattt gccagttaat cctggcatgg gttggaatgg ggagtgacct gggtctcata 660
atattgtcat atactttgat tctgcgctct gtactcagac tcaattcggc tgaagctgtt 720
tctaaggctc tgaacacttg tagctcccac ctcatcctca tcctcttctt ctatactgtt 780
gttgtagtga tttcagtaac tcacttgtca gagaccaagg ccaccttgat cccagttttg 840
ctcaatgtga tgcacaatat cactcctct tcactcaacc ctattgtgta tgcacttagg 900
accagacaac tcaggcaggg cttccaaaag gtgctttgtc ggagcttaca agaaaaataa 960
<210> 1200
<211> 942
<212> DNA
<213> Mus musculus
<220>
<223> MOR204-34
<400> 1200
atggctttcc tggaggatgg gaaccacact gtagtcacag agttcatttt attgggctta 60
actgatgacc cagttettag agteatecte tteateatea teetgtgeat etacetggtg 120
actgtgtctg ggaatctaag caccatcctt ctcatcagag tctcttccca gctccatcac 180
cccatgtact tttttctgag tcacttggct tccattgaca tagccatctc ttcttctgtc 240
acaccaaata tggttgtcaa cttcctggtg gagaggagca gtatatccta cattgggtgt 300
ggcatccage ttggctcage tgttttcttt ggtgctattg aatgtttcct tctggctgtc 360
atggcttatg atcgttttgt ggcaatctgc aatccactgc tttattcaac taaaatgtcc 420
aaacaagtgt gtatccaatt gcttgtaggg tcttatattg gtggctttat tcatgcttcc 480
ttctttacac tttcctttgt ttcttttctt ttctgtggac caaatagaat caatcacttt 540
ttctgtgatt ttactccttt agttgaactc tcctgttctg ataatagtgt cctcataatt 600
cttgattcat tttctactgg cactattatt gtaatcacag tgtttgtcat tgctatttcc 660
tatacctgca tcctcatcac catcctgaag atgcattcca ctgagggtcg acacaaggct 720
ttctctacct gcacctccca cctcactgta gtcactctgt tatatgggac agtcacattt 780
atttatgtga tgcccaagtc cagctactcc acagaccaga acaaggtgat atctgtgttc 840
```

```
tacatggtgg tgattcccat gttgaacccc atcatctaca gcctcaggaa taatgagatt 900
                                                                  942
aagggtgctc tgaagaaaca gcttggtgaa aaaaatattt tc
<210> 1201
<211> 942
<212> DNA
<213> Mus musculus
<220>
<223> MOR204-35
<400> 1201
atggctttcc tgcacaatgg gaaccacact gcagtgacag agttcatttt attgggatta 60
acagatgace cagtetttag agteatecte tteaceatea teetgtgeat etacetggtg 120
actgtgtctg ggaacctcag caccatcctt ctcatcagag tctcttccca gctccatcac 180
ccaatgtact tttttcttag ccacttggct tctgttgaca taggctactc atcttctgtc 240
acacccaata tgcttgccaa cttcctggtg gagaaaaata ccatttccta tcttgggtgt 300
accatecage teagettage tgetttttgt ggtacagttg aatgetteet tetggetace 360
atggettatg ateggtttat ggeaatetgt ageceaetge tttatteaae taaaatgtee 420
acacaagtct gtatccagtt gattgtagga tcttatatag ggggttttct taatgcctcc 480
teetteacet tattettet ttetttete ttetgtggae caaatagaat caateaettt 540
tactgtgatt ttgctccttt ggtggcgctc tcctgttctg atgtcagtgt ctctgaagtg 600
gtaacgtcat ttttttctgg ctcagttact atgatcacaa tgttggtcat agccatttcc 660
tacacctaca tecteateae cateetgaag atgegeteea etgagggeeg eeacaaggee 720
ttctccacct gcacctccca cctcactgca gtcactctgt tctatgggac catcacattc 780
atttatgtga tgcccaagtc gagcttctcc actgaccaga acaaggtggt gtctgtgttc 840
tacatggttg tgatccccat gttgaaccca ctcatctaca gcctcagaaa taatgagatt 900
aaggatgctc tgaagagaca tcttggtaag aaaatatttt ct
                                                                   942
<210> 1202
<211> 924
<212> DNA
<213> Mus musculus
<220>
<223> MOR179-5
<400> 1202
atgaggaaca tcacagaagc tactttcttt qttctcaagg gactcacaga caacaatgaa 60
cttcagatca ttctatttct cctctttcta gcaatttaca tttttactct gataggaaat 120
gtaggactta ttattttagt tgttggggat tctcagctcc acaaccctat gtactgtttt 180
ctcagtgtgt tatcttctgt agatgcctgt tattctacag atatcacccc aaatatgcta 240
gtaggcttta tgtctaaaag caaaatcatt tcattttatg gttgtgcaac acagatgttt 300
cttgctgtta catttggaac cacagaatgc tttcttttgg cagcaatggc ttatgaccga 360
tatgtagcca ttcatgaccc acttctgtat gcagtgagca tgtctcctcg agtctatata 420
ccacttatca ttgcatccta tgctggtgga attgtgcatg ctattatcca cacagtggcc 480
actttcagcc tgtctttctg tcggtccaat gaagtcaaac atatattctg tgatatacca 540
cotottettg ctatttectg ctctgaaact tatgtaaatg agetettget ettettette 600
gtgagtttca tcgagctagt caccattctg attgtcctgg tctcctatgc ttttatcctg 660
ttgtcaattc tgaagatgaa ttcatctgaa qggagaagaa aagtcttctc tacatgtgga 720
geteacetea etgetgtgte catttattat ggeacaatee tetteatgta tgtaagaeet 780
agttccaact attccctgga gcatgacatg atagtgtcta cattttatac cattgggatt 840
cccatgctca accccatcat ctacagtctg agaaacaaag atgtaaaaga ggcaatgaaa 900
                                                                   924
agagttttga gaaaaaaaat taat
<210> 1203
```

```
<212> DNA
<213> Mus musculus
<220>
<223> MOR259-10
<400> 1203
atgtggatga ttccagggca gaaccaaagt tgggtttctg agttcatctt gattggcttc 60
tocagtgace ecaegaceaa cageateete tteattgtet teetteteat gtacetgage 120
tcagtcctgg gcaatgggct catcatcatg ctggtctgcc tggacacaca gctgcacact 180
cccatgtact tetteetetg taccetetee etgttggata tgggetatgt caccaccace 240
atgccccaqa tgttggtgca tcttcttgct cactctcaga ccatctcctt tgctggctgc 300
tggctgcaga tgtatgtgtt tggtgccctg ggtatgactg agtgcacctt ctttgttgtg 360
atggettate acceptatgt ggeeatttge tatecactge getatactgt catecteaac 420
tggggcttgt gcatacggtt ggcaggaggg tcttggatat gtggtttatt ttcttctttg 480
ttacatactt tetteaceat gagtetgeea tattgtggae ceaacaggat caaceactae 540
ttctgtgaag gtccttcagt gcgtagcctg gcttgcatgg atactcatgt cattgagatg 600
gtggactttg tattgagtgt ttttgtggtt gttattccaa tctccctcat tgtggcctcc 660
tacattggta ttgccatggc gattctcaag atcaagtcca accagggccg ttgcaaggct 720
ttctctacct gtgcctccca cctgactgtg gtcacattct tctatgctcc agccagttac 780
atctacatga ggccaaactc cagctactcc cctgagcgag acaagcagat ctcactcttt 840
tacaatgtct tcacagcctt gctcaaccct gtggtctaca gcttgagaaa caaagatatc 900
                                                                  948
aagagggcat ttctcaaggt gatgggacat ggtaggctgg cctggtaa
<210> 1204
<211> 984
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (867)...(886)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR142-1
<400> 1204
atggaaagag aaaaccaaac aggagaaaga aactttctcc tcctgggatt cacagaagac 60
tetgacetge agteettett etttgggttg ettettteta tgtacetggt caccatcaca 120
ggcaacttgc tcatcattgt ggccatcata tctgacccc acctgcacat gcccatgtac 180
ttattcctct ccaacctgtc catagctgac atcggcttca cctccaccac tatccccaag 240
gttctgcaga atatccgcac acaaagcaaa ttcatctctt tctcgggctg catcacacag 300
atattttttt tcattgtgtt tggatgcctg gacaatttac tcctatcagt gatggcctat 360
gaccgctttg tggccatctg ccatcccttg cactatgtgg tcatcatgaa ttcttgcttc 420
tgtgcgatgc tggctcttgg atcatggata gtcagcgtca tgagttccct acctgagacc 480
ttgactgtgt taagactatc cttctgtaca aacatggaaá ttccacactt tttctgtgat 540
cttcccgaag tcctgaagct tgcctgttct gacacccttg ttaataacat tgtgacatat 600
tctataacca tagtcatagc tggtttccca ttctctggga ttctattgtc ttattctaag 660
attiteteet eeateetaag aatteettea getgggggea agtacaaage ettitetaee 720
tgtgggtctc atcttttggt ggtcttctta ttctatagca atggtctagg ggtctacctt 780
agctctgcag ccacatcatc ttctagaatg agtctagttg cctcactgat gtacagcata 840
qtcactccca tqctqaaccc cttcatnnnn nnnnnnnnn nnnnnntttt tatttattca 900
ttgagaattt catgcataca cacaaatatg atcataaata aaaagtctca gaagtttaaa 960
agagacactg ggacaaattg ttaa
                                                                  984
```

```
<211> 954
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (30)...(49)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR171-45
<400> 1205
tcaatgatta tttgggtgtg tttactgaan nnnnnnnnn nnnnnnnna aaaagttcag 60
ctgccccttt ttctcctatt tgtagcaatc tatctgatca ctgtggcagg aaacctgggg 120
atgattgcat tgattgggat cagttcccac ttgcacacac ccatgtacta tttcctcagc 180
agtetgteet teattgaett etgteagtet acagttgtta cecetaaaat gttggtgage 240
cttctgacaa agaagaacat catctcctac tctggatgca tggttcagct ctacttcttc 300
atcagttttg gaactgcaga gtgctacaca ttagctgtaa tggcatatga ccgctatgtt 360
gccatttgta accccctacg ttacaatgta accatgtcct atcagattta cagttccttg 420
atttcagggg tgtatattta tgctgtgttc tgtgcatcag taaacaccgg ctttataatt 480
aggattcagt tctgcaagtt aaatgtgatc aaccactatt tctgtgatct tcttcccctg 540
ttgaaacttg catgctctaa tacctatatc aatgaaatat tgattctatt ttttggttca 600
gtaaacatct gtgtcccaat gctgactgtt attacttcct acatcttcat cattgccagc 660
atcctccgta ttcgctccag tgagggcaag ttcaaagcct tcagtacttg cagttcccac 720
atctctgctg ttgctatctt gtatggttct actgcattca catacttaca gccttcatca 780
gtgagtttgg tggaccaagg gaaagtgtcc tctgtgtttt atactactgt tgtacctatg 840
ctgaacccat tgatctacag cttgaggaat aaggatgtca ctcttgcatt gaaaagaatt 900
cttgaacaaa aaaggcttta tgtaagcaga agtcgtgtga agattattaa ttag
<210> 1206
<211> 858
<212> DNA
<213> Mus musculus
<220>
<223> MOR170-12
<400> 1206
ctgcccttat ttgttctgtt cttgatgaac tacacagcta ctgtgatggg aaacttgagc 60
ttaatgagtc tcatttgctt aaactcaaac cttcacaccc ccatgtactt tttcatcttc 120
aatctgtcct ttattgactt ctgttattca ttagtctcta ctcccaaaat gctaatgagt 180
tttcttttag agaagaacac catctccttc agaggatgca tgactcagct gtttttctac 240
tgtgtttttg tgaactctga gagttatgtg ctgacagcaa tggcctatga tcgctatgtt 300
gccatctgtc agccacttat gtacaagatc attatgtccc ctaaaatctg ttgtctgttg 360
atatttggtt ctttcttgat ggggtttgtt agcgccataa ttcacacagg atgcatggtc 420
aggeteagtt tttgteatte taaaattate aaceaetaca tgtgtgaeat ttteeetete 480
cttcaacttt catgcagtag tacttatgtc aatgagctta tgagctatgt tgtggtgggc 540
acatctatca ttttatgttg cctaattatc ttaatttcat atgctatgat cctcttcagt 600
atcattcata tgtcatcagg taagggttgg tccaaaagctt tgggcacttg tgggtctcac 660
atcataactg ttagtctctt ttatggatct gggctgcttg cttatgtcaa tccgtcatct 720
gctgaaactg tgggtcaggc aaaatttttc tcagtgtttt atacattatt ggtgcccatg 780
ttgaaccctc ttatttatag cctcaggaac aaggatgtca agcttgctgt gaaaaagacc 840
tggaaaagaa tcacaagc
                                                                  858
<210> 1207
```

<211> 993

```
<212> DNA
<213> Mus musculus
<220>
<223> MOR204-36
<400> 1207
atggctttcc tagaggatgg gaaccacact acagtgacag agtttatttt attgggatta 60
actgatgacc cagttettag agacateete tteateatea teetgtgeat etacetggtg 120
actgtqtctq qqaacctcaq caccatcctt cttatcaqaq tctcttccca qctccatcac 180
cccatgtact ttattctcag ccacttggct tctgttgaca taggcatttc atcttctgtc 240
acacccaata tgcttgctac cttcctagta aaacaaaata ccatctccta cattggatgt 300
tctattcagt ttacctcggc tgctttttt gggacagttg aatgcttcct tctggctacc 360
atggettatg ategatttgt agecatetge aacceaetge tttatteeac aaaaatgtee 420
acagaageet qtatecagtt qqtqqtaqqa tettatatae aqqqttttet taatqettee 480
tttttcactc tttccttctt ttccttqttc ttctqtqqac caaataqaat caatqacttc 540
tactgtgatt ttgctccttt gttggaactc tcctgttctg atgtcactgt tgctgttgtt 600
attacctcaa tttctqctqq ctttatcaca ctqacaacaq tqtttqttat agccatctcc 660
tatteetgta tttteateac tattatgaag atgeacteea eegaaagteg atgeaaggee 720
ttctccacct qtacctctca cctcactqca qttattctqt tctatqqaac tqctatattc 780
atttatgtga tgcccaagtc cagctactcc actgaccaga acaaggtgtt gtctatattc 840
tacacagttg ttattcctat gttgaacccc ctcatctata gcctcaggaa taatgagatt 900
aaggaggete taaagagaca eettggtaag aaagtatttt ettatggtaa eetgttttgt 960
aaaactcact ataaccacaa ttacccagta tga
                                                                  993
<210> 1208
<211> 952
<212> DNA
<213> Mus musculus
<220>
<223> MOR32-12
<400> 1208
atgactgaga gaatgtccct gtataacgtc acagaagtcc atccttcttc gttcctcctg 60
ctgggcatcc cagggcttga aaatgcacac atctggattg gatttccctt ttgtttactc 120
tatctcattg cagtcctggg gaatggtgct gttttatttg tgatccaagc tgaacacagt 180
cttcatgage ccatgtacta cttcctagee atgttagatt ccattgacet gggactgace 240
acagecaeca tececaaaat getgggeate ttetggttea ateteaggga aatatetttt 300
ggaggttgcc tttctcagat gttcttcatc cacttcttca cggccatgga aagcattatg 360
ttgttggcca tgggctttga ccgctacatt gccatttgta agccccttca atatactgtc 420
atteteacea acaaagteat tggggteatt geaggtattg eagtgetgeg gageetetae 480
atggttette caetggtgtt teteetaetg aggetaeeet aetgtggeea teaaageatt 540
cctcatactt actgtgagca catgggcatt gcccgtctag cttgtgccag catcaaagtc 600
aacatcatgt ttggtcttag caacattgct ctcttgctcc tggatgtagt tcttattatt 660
ctctcctatg tcaggatcct ctatgcagtg ttctgcctgc cctcccggga ggccaggctc 720
aaggetetea atacetgtgg eteteatata ggtgttatet taacettttt taeteeagea 780
tttttctcct tcttgacaca tcgttttggc cacaatgtgc cccaatatat ccacattttc 840
ttggccaatc tctatgtggg ttgtcccacc tgcccttaat cctgtgatct atggggtaag 900
gaccaagcaa attcgggagc aagtaatgag gattttgttc cgtaaagatc ac
                                                                  952
<210> 1209
<211> 999
<212> DNA
<213> Mus musculus
<220>
```

```
<400> 1209
atgactecae tettatattt tgegeeteta agageagete ggggeteeae tgeageaaca 60
agagggcaga atgacagete tgtggeegaa tteateetee tgggetttte tgeetteeet 120
gaactccaag ggcagatgtt tggggctttc ctggtaattt atctggtgac cctgatggga 180
aatgecacea ttgttgetgt cateeteetg gaccagaget tgeacateee catgtatetg 240
tttctgcaaa atttatctgt ggtagaaatg agtttcagtg cagccattac acctgaaatg 300
ctggtagtcc ttaccagcga gaaagcaacc atttcctttg ggggctgttt tgcacaaatg 360
tatttcattc ttctctttqq tqqaactgag tgttttctcc tgggggcaat ggcttatgac 420
cgatttgctg caatctgcca tcctctgtct taccctatga ttatgaacaa aagggtcttt 480
gtgaaattag ttatattctc atgggtatct gggatcatgg tggctactgt gcagaccaca 540
tgggtgttta gcttccccta ctgtgaccac aaggagatta accatctctt ctgtgagact 600
cctcctgtgc tggagcttgc ctgtgcagac accttcctgt ttgaagtcta cgccttcaca 660
ggcaccattt tgattgtcat ggtccccttt ctgttgatac tcttgtctta tactcgaatt 720
ctcttctcca tcctgaggat gccatccact acagggaggc agaaggcctt ttctacgtgt 780
gcctctcatc tcacctctqt caccctcttc tatqqcacaq ccaqtataac qtatctacaq 840
cccaaatcca ggtactcacc agacaccaag aaactgatgt cactggcata cacacttctc 900
acacctctgc tgaatccact tatctacagc ctgagaaaca aggagatgaa aagggctgtg 960
ttgaaattat ggcaaagaaa agtggcttta cacagaggt
                                                                   999
<210> 1210
<211> 927
<212> DNA
<213> Mus musculus
<220>
<223> MOR268-6
<400> 1210
cacageteta cagttgaatt cateetettg ggatttteta actateetga actteaaggt 60
cagatgtttg gggctttcct agttatttat ctggtgactg tgttgggaaa tgccatcatt 120
atcaccatca tetteetgga ceagagtttg cacateecea tgtatttgtt tetgeagaat 180
ttatctttag tggacttctg tttcagcaca gtcatcacac ctgaaatact ggtgatcctg 240
actagtgaga aagcgaccat ttcctttggt ggctgttttg tgcagatgta cttcattctt 300
ctctttggtg cgactgagtg ttttctcctg ggggcaatgg cttatgatcg atttgctgca 360
atctgccacc ctctgaccta cccagtgatt atgagcaaaa ggacctttgt gaaattggtg 420
atgtgtccat gggtcttgag tatcatgaca gctgttttgt cagtcacatg ggtggctagc 480
tttccctact gtgaccacaa ggagattaac catctcttct gtgagattcc tcctgtgctg 540
gagettgeet gtgeagaeae etteetgttt gaagtetatg eetteaeaag eaceattttg 600
atogtoatgg toccottott gttgatactt ttgtottata otogaattot ottotocato 660
ctgaagatgc catccactac agggaggcag aaggcctttt ctacgtgtgc ctctcatctc 720
acctctgtca tcctcttcta tggcacagcc agtataactt atctacagcc caaatccggg 780
tactcaccag acaccaagaa actgatgtca ctggcataca cacttctcac ccctctgctg 840
aatccactta tctacagcct gagaaacaag gagatgaaaa gggctgtggt aaaattatgg 900
caaagaaaag tgactttaca cacaggt
                                                                   927
<210> 1211
<211> 966
<212> DNA
<213> Mus musculus
<220>
<223> MOR105-10
<400> 1211
atggggttet ccaattggae cactgeteag gagtteattt tttetgettt ceettgetee 60
```

```
tggggagatt ctgtcatctg cttcatccca ctgctcttca tctatgcttt cattatcgtt 120
gggaacctgg ttatcatcac agtggtccag ctcaacgcac acctccacac acccatgtac 180
ttcttcatca gtgccctttc cttcctggag atatggtaca ccactgccac catcccaaag 240
atgeteteta geetgettag tgaacgaagg agtattaegt tgaatggttg tgteetgeag 300
atgtatttct tccattccac aggcatcagt gaggtttgtc tcttgacagc tatggccttt 360
gategatace tggetatetg cagecetett cattateeta ceateatgae ttecagaetg 420
tgtgcccage tgaccctcgg ttgctgtgte tgtggettte tcacacccct ccctgagatt 480
geetggatet etacaettee tittigtgge tetaateace tigageatat etictgtgae 540
tteeteeegg tgetgegeet ggeetgeaea gatacceaea ceategteat gatteaggtg 600
gtagatattg tccatgctgt ggagataatt acggcagtga tgctcatttt catgtcctat 660
gttggtattg tggctgtgat tctgcgcatc cqttcaqctq aaqqccqccq taaaqcattt 720
tecaeatgtg tetegeacet tactgtettt ttgetettet ttggtagtgt ggeteteatg 780
tatcttcqct tctctqctac ctactccttg ttctgggaca ctgccattgc tctggccttt 840
gcagttetat eccepttett caateecate atetatagee ttaggaacaa agaaataaaa 900
gaagccataa aaaagcacat aggtcaagct ggcatcttaa ttggcaagag cagaaacctc 960
ccttaa
<210> 1212
<211> 945
<212> DNA
<213> Mus musculus
<220>
<223> MOR258-6
<400> 1212
atgcacagtc gaggctggag aaatcacagc tctgtaactg agttcatcct cttgggcttc 60
tccagaaacc ccaggaccaa ttggatcctt ttttttctct tcctcttcct ctacttattt 120
acaatcctgg gtaatggact cattgttacc ctgattagaa tagatgctcg tctccacaca 180
cccatgtatt tctttctcag catcctctcc ctcctqgatc tgagttatgc caccacgacc 240
gtgccccaga tgttggctca tctagtaagc aagactaaga ctatctctta cactgggtgt 300
gtgattcaga tgtatatttt cttgacacta ggcatcactg agacctggat ttttgcagct 360
atggcctatg acagatatgt tgctatatgt tatccactcc actatggagt caagatgagc 420
caaaccctat qcataqccct qqtqqtcaqc tctqcccttt qtqqcctcat ctqtqccctt 480
gtctacacag tctttqcaat qaatcttcct tactgtqqcc ccaatqagat caaccacttc 540
ttttgtgaaa tccctgctgt cttgaagttg gcctgtgcag acacatccct caatgaccaa 600
gtagacttca tcctgggctt catcttgctt ctgatcccat tatccctcat tttggcctca 660
tatgttcgga tcttcatagc cattctaagg atccgctcta ctcaaggacg gatgaaggcc 720
ttctccacct gtgcttcaca catcactgtg gtcaccatgt tctgtgttcc atgcatggtc 780
atgtacatga gacctggctc tgaagcctcc ccagaagatg ataagaagct ggccttgttc 840
tataatgtca tttctgcctt ccttaacccc attatttaca gtctccggaa caaagatgtg 900
aagaaggett tetteaagtt aattggaagg ggtgaggaca eecag
<210> 1213
<211> 945
<212> DNA
<213> Mus musculus
<220>
<223> MOR202-34
<400> 1213
atgtcatact tggagaatag cactaaggtg actacattta tccttttggg attgactgat 60
atcocagage tgeaagteee tetgttegte acgtteagte teatetatet tateacactg 120
attgggaatc tgggcattat cgtgttgata tggctggact tccgcctcca cacccccatg 180
tatattttcc tcagtcacct ctctctggca gactgtgttt actcctccgc tgtgactcca 240
aaggtgatgg ttgggtttct cacaggggat aaagttatct cctatggagg atgtgttgct 300
```

```
caaatgttct tctttgtggc ttttgccagt gttgactgtt tcctacttgc tgtcatggct 360
gtgtgtgctc gcatggtgat tgcctgttat tcctggggtt tgtttgagtc tgctatacat 480
actggattca cetteteet cecetactgt getaatgtgg tteateactt tttetgtgat 540
atacctccaa tcctggctct ttcttgctct gatatctatg tgaatgagat tgtgctcttt 600
atcttagctt cattcaatgt cttctttgct ctaatagtta tcttgacctc ctatgcattc 660
atatttattg ctattctgag aatgcattca gcagaaggac ggaagaaggc cttctctact 720
tgtgcatccc acctcactgc tgtcactata ttctatggaa ctgtaatctt catgtaccta 780
cagcccagtt ctagtcattc catggacaat gaccaaatgg catctgtttt ctatactaca 840
atagtteeca tgttgaacce agttgtetat agettaagaa acaaagaggt teataatgee 900
ttcaagaaag ttgttgagaa aatgaacact ttgttgaact cctaa
                                                                 945
<210> 1214
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR202-35
<400> 1214
atgacactgg tgaagaactg gacatatgta acagagttca ttttgctggg actcactgat 60
gatecaggee tgeagettee cetetttgte atetttetee teatetaeat cateaceetg 120
gtagggaacc tggggatgat cctgctgatt ttcttggact ctcagctcca catccccatg 180
tactttttcc ttggtaactt gtccctggtg gacgtttgtt actcttcagc tgtcactcct 240
aaagtcatag ctgggctgct aataggagac aagttcatat cctacaatga ctgtgctgct 300
cagatgttct tttttgcagc ctttgctact gtggaaaatt acctgttggc ctcaatggcc 360
tatgatcgct atgtagcagt gtgtaaaccc ctacattata ccacaaccat gacttcaaat 420
gtatgtatet gtetgateat ggggtgetat ggttttagtt teetcaatgt eteagtttat 480
ctaggagata catttagtct ttctttctgt aattctaatg tggtccatca ttttttctgt 540
gatatgccag caatcatggc teteteetge tetgataaac atgttaatga actagtaett 600
atttacctag caagcttcaa tatcttcgtt gctttcataa tgataatagt atcttacctt 660
ataattttta tcacaatctt aaacatgcgc tcaagagcag gagttcagaa ggctctttcc 720
acctgtgtct cccacttaac tgctgtcttt attttctatg gaactataat cttcatgtat 780
ttgcagccaa gctctagaca tgcaatggac actgacaaaa ttgtgtctgt gttctacacc 840
atggtcattc caatgctgaa ccctttagtt tacaqcctga ggaacaaaga ggtcaagagt 900
gcattcatga aaatagttct gaaagaaaaa tcatta
                                                                 936
<210> 1215
<211> 942
<212> DNA
<213> Mus musculus
<220>
<223> MOR202-36
<400> 1215
atggagaata tttcagaggt tactgaattt attctcatgg ggataacaga tgccccagag 60
cttcagattc ctttgtttat tatcttcact ctcatttatt tgatcgcact gtttggaaat 120
cttgggatga tcatgttgat tctgctagat tcccgactcc actctcccat gtactttttc 180
ctctgtaacc tctccctggt ggactgtgtt tatgcctcag ctgtcactcc caaggtgatg 240
gaagggtttc tcacaggaaa taagataata tcctacaatg catgtgctgc ccagatgttc 300
ttctttgtag cctttggtgc tattgaaagt ttgatccttg cctcaatggc ctatgaccgt 360
catgcagcag tgtgcaaacc cctgcactat actaccatta tgacaagtac cacctgtatt 420
ctaattgtca cttgctgcta catgtgtggg atcttacaat cctctattca tgttgctctt 480
gcattttgtc tttccttctg taattccaac gtgattaatc actttttctg tgacattccc 540
ccactgctgg acatctcttg ttctgatacc tacacaaatg agattacagt ccttatcttg 600
```

```
ggtacttgtg atggtatttt aactctcttg gttatcttaa acacttactt gcttattttc 660
attgctatcc tgagaatgcg ttcagctgaa gcacagagga aggcattctc tacctgtgca 720
teteatetea teaetgtatt catettettt gggteaacet tgtteatgta tttacageee 780
agttctaatc attccatgga cacagacaaa attgcatctg tgttttacac catggtgatt 840
cctatgctga accctgtagt atacagttta aggaacaagg aggtaaaaaa tgcatttaag 900
aaggttgttg gaaaattaat gacttcactt cagttagtca at
                                                                  942
<210> 1216
<211> 966
<212> DNA
<213> Mus musculus
<220>
<223> MOR210-5
<400> 1216
atgggtgaca aggagagaga caaccactca gaagtaactg acttcattca ccactcagaa 60
gtgactgact tcattcttgt aggcatcaga gtccqtccag agctccacag tqtccttttt 120
cttctatttc ttattattta tgggatggtt cttctgggaa accttagcat gattggcatc 180
ataqtqactq atcccaqqct qaacacaca atqtatttct tcctaqqcaa cctctccqtg 240
attgacctct cctactccac ggttattgta cctaaagcca tggtaaacat cttatctcag 300
aaaaagacca tatcctttgt gggttgtgca gctcaacttt tcctttatgc acttttcatg 360
gtaacagaag cetttatact agcagecatg geetatgace getteattge catetgeaat 420
ceteteettt acagegtteg aatgteaagg agtgtetgtg tecagttggt ggetggttee 480
tatctctgcg gctgggtcag ttccatcctc caaatcagtg taacattctc catgtctttt 540
tgtgcctcta gggtcattga tcacttctac tgtgattcta atccaatcga aaagatctcc 600
tgttctaata cttttatcaa taagatggtg tcacttagtc tggctgtgct tattattttg 660
ccaacaataa tagttattgt agtatcttac atgtatattg tatccacagt tttaaagata 720
cattccagtg aagggagaaa aaaagccttt tctacctgca gctcccactt gggggttgta 780
agtttgcttt atgggactgt ttcctttgtg tatctcacac ctccaaataa tcctgaactt 840
cgtaaaattg cttcagtatg ttatattttg ttcacaccta tgttgaatcc cctaatctat 900
tetttaegaa ataaggatgt aaaagatgee atgaaaaaag tettgtgeaa geaaaaggtt 960
ttactc
<210> 1217
<211> 984
<212> DNA
<213> Mus musculus
<220>
<223> MOR106-11
<400> 1217
atgatcactc atttctcagt tgtttctgtt tttctaacag ctttcggatc caagaacagc 60
tocatacatt ttgtgactga gtttatcctc ctgggtttca gtaaccaggg ggagatgcaa 120
agtttettet tetgtteaat tetgattett taceteetga eettgetggg gaatggaact 180
attgtttgtg ctgtgagatg ggatcagagg ctccacacac ccatgtacat cttcctggga 240
aactttgcct ttttagagat atggtatgtc tcttccacca tcccaaacat gttggtcaat 300
attetetetg agaataagae cateteette tetgeetget teetteaatt etatttettt 360
ttttcacttg gtacaacaga gtgtttcttc ttgtcagcta tggcttatga tcgatacctg 420
gctatctgtc gaccattaca ctacccctct atcatgacta ggaagttctg tgtcatcctg 480
atttgtatct gctgggtgag tggattcctc tgctatccag tcccaattgt cctcatctcc 540
caacttcctt tctqtqqtcc taacatcatt qaccactttq tqtqtqaccc aqqaccattq 600
tttgcactat cctgtgtgcc tgctccttcc actgaacttc tctgttatac cttcaactca 660
atgattatet ttgggeeett ettetgeate etgggateet ataetetagt aeteagaget 720
gtgtttcgag ttccttctgg tgctggtcga actaaaqctt tctctacatg tggatctcat 780
ttagtggttg tgtctctgtt ctatggaact cttatggtga tgtatgtgag cccaacatca 840
```

```
gggaatcctg caggaatgca gaagattgtt actctqattt actcagcctt gaccccctc 900
ttaaatcctc tcatctatac tctccqaaac aaaqaaatqa aaaatqcctt aaaqaaactq 960
ctaaagctaa caattatcca aaac
<210> 1218
<211> 942
<212> DNA
<213> Mus musculus
<220>
<223> MOR106-12
<400> 1218
atgaacgtgt cagagggatc cacggtgaca tattttgtct tattgggatt ccctggtccc 60
tggaagattc aaatcacact tttctcactg attctgctgc tctacatgat aactttgact 120
gggaatatgg ccatcatttg tgcagtgaga tggaaccaac aactccacac ccctatgtat 180
atgttcctgg ccaacttctc cttcctaqaa atctggtacg tgacctgcac agttcccaac 240
atgctgatca actetette caaaactaag actatatett teaetggatg etttacteag 300
ttctacttct tcttctccct gggcacaact gaatgcttct tcctctgtgc catggcttat 360
gatcggtacc tagccatctg ctacccactg cactatcctt ccatcatgac taggcaattc 420
tgcagtattc tgatgtccct ctgttggatc attggtttct ctqcacattt qattcccatt 480
ttccttattt ctcaattgtc tttctgtggc cccaatatca ttgatcactt tctctgtgat 540
gtggacccac taatagcact gtcctgtacc cctacacaca tcataagtca tgtattctat 600
tetataagta etettateat tatteteact ggtttgtaca teettggate ttatgeettg 660
gtgctcagag ctgttcttca ggttccttct tcagatggac gtcaaaaggc cttctcaacc 720
tgtggatccc acctgctggt agtgtctctg ttctatggaa ccataatggt gatgtatgtc 780
agccccacat ctggcaactc agttgacatg aataaaatta tcacactgat atattctgtg 840
gtgacaccag ctttaaatcc tttcatctat agtctgcgta acaaggatat gaaatatgct 900
ctccatcatg tcttctttgg gaatagcatt atgcaaaact ta
<210> 1219
<211> 945
<212> DNA
<213> Mus musculus
<220>
<223> MOR243-1
<400> 1219
aaaaacaaaa acagctctga tgtgtcacga tttgtgcttc tggqcctgtc gtcttcctgg 60
gageteeagt tgtttetett etteacattt ttgttgattt acetggttat tgteetggga 120
aaccttttga tagtgatggt cgtccaagct gatgctcacc tgttccagtc acccatgtac 180
tattttctaa gccatctgtc tttcattgac ctttgcctga gctgtgtggc tgtacccaaa 240
atgctaggag atttcctaca gaaggagaag acaatatctt tttcaggatg cctggcccag 300
gtattettte tteaetttet tggagecagt gagatgttee tgttgaetgt tatggeetat 360
gataggtatg ttgccatatg caaccetttg cactacetga eggteatgaa taaccacetg 420
cgacttcggt tggtgtttgg ctgctggtgt ggaggtttca ttcactctat cacacaggtc 480
atgattgtca ttcagctgcc tttttgtggt cccaatgaac tggacaactt ctactgtgat 540
gtcccccagg ttgtcaagct ggcctgcatg gacacttact tggttqaggt gctgatggtc 600
tctaacagtg gcatactgtc tcttgtctgc ttcttggtcc tgctcttctc ctatgctctc 660
atcttgatta ctctgagaac tcacctccac cggggccaga gcaaggcact gtccacctgt 720
getteteact tgacggtggt cageetgate tttgtaceet gtgtatteat ttaettgagg 780
cctttctgta ccttctctgt ggataaagta gtctctgtgt tttacacagt gatcacacct 840
atgctgaacc ccctcatcta tacactcaga aatgcagaca tgaagcaagc catagaaaag 900
ctgagaaaga agcaagtggc atcccactgc tttgctaaag gatga
                                                                  945
```

```
<211> 978
<212> DNA
<213> Mus musculus
<220>
<223> MOR264-20
<400> 1220
atgcaatcca aatatgtgaa cctacaaaga gcaaacaaat ttaaaatcac agacacaaat 60
cttagtgtac ctatagaatt tgttctcttg ggattttctg atattcccca attgcactgg 120
tttctctttg qaatcttctt cttcatctac atgattatcc ttctgggaaa tggcctcatc 180
attttaatca caagagttga acccactctg caaaccccca tgtacttttt catcagcaac 240
ctttctttcc tagaaatttg ttatgtttct gtcactcttc ctagaatgct tatggatctc 300
ttcacactga aaggaaatat ttcctttctt gcctgtgcta cacaaatgtg tttattcctt 360
atcctgggtg gcactgaatg cttcctcctg gctgtgatgt cctatgaccg ctatgtagcc 420
atctgcaacc ctctgcacta tcctatagtc atgagttcca aggtgtgtac ccagttagtg 480
gttggttcct gggtcattgg tgttcccatt caggtggggc agacatatca gattttgtct 540
ctgcccttct qtgaatctaa ccaaattaac catttcttct qtgacatgcc tccactactc 600
agattggcat gtgggaacat ctttgtgaat gaacttgtgg tctttatttt tgttgtattg 660
attgtcacta tcccattcat gttaatactt gcatcttaca gcaggatcat ctcaactatc 720
ttgaagttgc catcaaagac aggaaggaca aaagcctttt ctacctqctc ttcccacctt 780
atagttgtgt ttttattcta tggatcagct agtatcacct atttaaaacc taagtccaat 840
aagtttgagg ggacagacaa acttetetet etgttttaca ecattttgac tecaatgtte 900
aatcccttga tatatagcct gaggaacaag gatgtcacag gggcactgaa aaaattattt 960
accagattqt tagcattq
                                                                   978
<210> 1221
<211> 930
<212> DNA
<213> Mus musculus
<220>
<223> MOR261-11
<400> 1221
atgggageca accaaacatg ggtcacagac ttcatectcg tgggacteca getcagegca 60
ggtatagaaa tgttcctttt ctggatcttc tccctgctgt acatcttcag cctgctcgca 120
aatggaataa tottagtagt catotgootg gaccocaago tgcacaccco tatgtactto 180
tttctttctc atctggccat tcttgacata tcctatgctt ccaacaatgt ccccaagatg 240
ttgtccaacc ttataaacca gaaaagaacc atctcatttg ccccatgcat cacacagaca 300
ttettgtatt tggcetttge egetteggag tgettgattt tggcageeat gteetatgae 360
aggtttgtgg ccatctgcca ccccctacac tacactgtca tcatgagttg gaaagtatgt 420
gtggccctgg ctgtcacatc ttggtcatgt ggatttagcc tctctgtggc acacacaatt 480
ctcctgctaa ggttgccctt ttgtgggccc caggaaataa accacctctt ctgtgaaatc 540
ctggctgttc tcaagctggc ctgcgccgac actttgatca accaaatcgt catcctagct 600
gcatgtgttt tcgtcttagt tggacccctt tgctcaatgc ttgtatctta cacgcacatc 660
ctctggacaa tcctgaaaat gcagtcaaag gagggtcgca ggaaggcctt ttccacctgt 720
tecteceate tetgtgtggt ggggetette tttggtatag ceatgttggt ttatatggte 780
cctgactctg atcagcgaga ggagcaggag aaaattttgt cactgttcca cagtctcttt 840
aacccaatgt tgaatcccct catctatagt ctgaggaaca cccaggtgaa ggaagccttc 900
cacagagcac tgcagaagaa gagatctgtg
                                                                   930
<210> 1222
<211> 924
<212> DNA
<213> Mus musculus
```

```
<220>
<223> MOR261-12
<400> 1222
atgaaccaga catggatcac tgaggtcatt ctactgggat tccaggttga ccctctctg 60
gagatgetee tgtttggget gtttttgetg ttetaetgee teaegttgat gggaaatggg 120
attatectgg ggeteatetg cetggatget aggetgeaca eteccatgta ettetteete 180
tcacatctgg ccatagttga catgtcctac gcctccagca ctgcccctaa gatgctgaca 240
aatatggtga tgcaccaaaa aagcatctcc tttgcttcat gcatacttca gacatttttg 300
tatctggctt ttgcagtgac agagtgtttg attctggtag tgatgtcata tgatcgcttt 360
gtagctatct gtcatccttt gaaatacaca ctgatcatga gctggagagt atgctccatc 420
ctggctgcta cttgctgggt gtttagcttc ctcttggcct cactccatat cacgctcatt 480
ctaagactcc cattctgtgg gccacaaaaa gtcaaccatt ttttctgtca aatcatgtca 540
qtattcagat tagcctqtqc agacacaaqa ctcaatcaaq tcqttctttt tqcaqqctct 600
gtgatggtct tactggggcc cctgtgcttg gtgttagtct cctatacacg aatcctggtg 660
gccattctcg gaatccactc aggggagggt cgcagaaagg ccttctccac ctgttcttcc 720
cacctctgtg tggttgggct cttttttggc tgtgctatcg ccatgtacat ggcccccaaa 780
tccaaqcatt cccaaqaaca qaqaaaqatc ctqtctttqt tttacaqcct tttcaaccct 840
atgctcaacc ctctgatcta cagtttgagg aacacagagg taaaaggtgc cttgagacga 900
gttctttgga aacagagatc actg
                                                                   924
<210> 1223
<211> 948
<212> DNA
<213> Mus musculus
<220>
<223> MOR174-16
<400> 1223
atggettatg aagtggtgaa teagagttet getaceaeat teatettggt eggtttetea 60
gaatatccac agctccaaat acccctcttc ctcctgttct tgaccatcta ctcagtaaca 120
ctgatgggga acctgggcat acttgtggtt ataaaggtta atcccaaact tcacactcca 180
atgtactttt ttcttagcca cctatcattt ttggatatat gttattctag tgtatttaca 240
cccaaacttt tqcaqatctt qattatqqaa qataqqacqa tttcttttat tqqatqcatq 300
atacaatttt tetttatttg tacattegtg attacagaaa tgttcatgtt ageagtgatg 360
gcctatgaca ggtttgtggc tgtttgtaat cccttactct acacagttgt aatgcctata 420
caattetgtg etetgetagt agetgggaca tatatgateg gtggactatg taetttgata 480
attotatata etettttgea aetetgttat tttgaatatg geateateaa teaetttgge 540
tgtgaatact ctgctgtcat ctctgtgtct tgctctgact cctcctttag ccagttgata 600
tgcttagtca tatctattgc tagtgaattt tctagtgtcc tgatcacttt agcctcatat 660
gtgttcatag ttgtcactat tataaagatg ccttccaaag gaggactaca gaaagccttc 720
tocacctgta cttcccacct gactgccata acaattttcc atgggatctt actactcctg 780
tactgtattc ccaactcaaa cagctcacgg ctctttgtca aagtggccac tgctctttat 840
acaatcatga tccccatgtt gaaccccctt atctatagcc ttagaaataa agatgtgaag 900
gacacagtca ggagacttat cagctcaaaa ctgcactctc acttgaca
                                                                   948
<210> 1224
<211> 942
<212> DNA
<213> Mus musculus
<220>
<223> MOR177-14
```

```
atgcaaagaa gaatggaagg ggaaaattgt tcttccttta ctgaattcat actaatggga 60
attaccaaca actotqaqqt aaaaqtqqtt ctqttcacaa tatttctact qqtctatcta 120
atcaatctca ttqqqaatct tqqaatqatt cttttaatta aaqtqqatcc tcaqctacaa 180
accocaatgt actttttcct cagtaacctg tccttctgtg atctctgcta ttccacagca 240
gttgggccca agatgttaat ggacatattt ggtaatgata aatcaattca attttttggc 300
tgtgctctcc aattcttcat ttcctgtaca tttgtggatt ctgaatgtat attgctggca 360
gtgatggcct ttgaccggta ccaggccatc agcaacccct tgctttatac aacaaacatg 420
tctaacaggc tgtgctcctt gttagtggct ggagtttatt ttgtaggtgt ggcagactct 480
ttgatccata caacattgac atttcatttg tgtttctgtg gatctaatga aattgatcac 540
ttottttgtg atatocotoc catottacta otgtootgot cagatacaca ggtoaatgag 600
ttagcaatat tcacaatttt tgggttcatt gaattgagca ccatctcagg tgtccttgtc 660
tectattqtt acateatete atcagttttg aagateaget etgetggggg caggtteaaa 720
gettteteta cetgtgeete ceacetgaet geagttgega ttttecaagg aactgtgett 780
ttcatgtatt tccqqccaaq ttcttcttat tctctqqatc aaqacaaaat gagctccctg 840
ttttatattc ttgtgatacc catgctaaac cctttgattt atagcctgag aaacaaagat 900
gtgaaagaag ctctgaaaaa tctgaaaaat aaaaggtgct gt
<210> 1225
<211> 999
<212> DNA
<213> Mus musculus
<220>
<223> MOR128-2
<400> 1225
atgttgccat ttaacgatga agatgaattt tcccttttta gatacagcag aaccatgcac 60
caaggaaacc aaactgctat ctctggattc atcctcctgg gactcacagt gggatctgag 120
cagcagctgc tectetteac actgtttete tgeatgtate tggtcaetat ggtaggaaac 180
tcacttatta ttctggcaat catcagtgat actcaccttt acagtcccat gtacttcttc 24.0
cttgccaacc tatccttcac agacatctgc ttcacaacca ctacagtccc taaaatattg 300
qcaqacattc aaaqccaqaa tccaaccatc tcctttqtaq qatqctttac acaaatqtat 360
tttttcatgt tcctggtgga cttggacaat ttccttttgg cagccatggc atatgaccga 420
tatattgcca tctgtcaccc attacactat gctgcactgt taaatcccaa gcgctgtgcc 480
ctgttggttg tggttccatg ggttatctct aatctagtct cagtactgca tctcagcctg 540
ctgagtcgct tgcctttctg tgatcagaga gtaatcccac acttcttctg tgatctggaa 600
cccqtqttaa qqcttqcttq ttcaqacact caaatcaaca atttqctcat cctcattqtt 660
gggggaacag ttatcttcgt cccctttgtt tttattcttg tctcctatgc acttattggc 720
actgctgtgc ttaatgttcc atcagtaaaa ggaaagtgga agacattttc tacatgtggg 780
teceaectet cageagtgte tetettetat gggtetattg ttggtgteta ettteteeca 840
gcttccagct actcagcaga aagggataag gtagctgcca tcatgtatac agttgtaacc 900
cccatgatga acccctttat ctatagtcta aggaacaaag acatgaaaag ggcactgaga 960
                                                                  999
aggctgctca gccaaaaaag cttgatttgt agttggtga
<210> 1226
<211> 945
<212> DNA
<213> Mus musculus
<220>
<223> MOR202-37
<400> 1226
atgatgcaga atatttcaga actgtcagaa tttattcttc ttgggttaac agatgcacca 60
ttcctgcaaa ctcctttatt tatcatcttt actctcattt acttgacaac attgtttggg 120
aatcttggaa tgattttgct gattctgctg gactccagac tccacactcc catgtacttt 180
ttcctcagta acctctctct ggtggactgt gtttatgcct cagctgtcac ccccaaagtg 240
```

```
atagaagggt ttctcacaga aaataagatc atatcctaca atgcatgtgc tgcccagatg 300
tttttctttg tagcctttgc tattactgag tgttttattc tggcctcaat ggcctatgac 360
cgtcatgcag cagtgtgcaa accettgcat tactccacta ctatgacaac tacgatatgt 420
gtcctgcttc ttgctggatc ttacttgagt ggactcttac aatcttccat ccatgtttcc 480
ttcacattcc atctttcctt ctgtcgttct aatgtagtca atcacttttt ctgtgatatc 540
cccccactat tagctctttc ttgctccagt attcacataa atgaaattat actcttcatg 600
ttggcaggat tcaatgttgt tttttcccta ttggttatat tgacctctta cttactaatt 660
tetgttgcaa ttgtgagaat gegetetget gagageagga agaaggeeat ttecaectgt 720
gcatcccacc ttaccactgt ttccatcttc tatggcacaa ttatcttcat, gtacttacag 780
cctagctcca atcactccat ggacactgac aagatggcat ctgttttcta caccatggtc 840
attoccatgo tgaaccotot tgtatatago otgagaaata aagaagtoaa gaatgoagto 900
                                                                  945
aggaaggttg ctggaaaagc attgttttca ctgggattag tcaat
<210> 1227
<211> 960
<212> DNA
<213> Mus musculus
<220>
<223> MOR218-8
<400> 1227
atgaatgtga getteaagae tggatteete eteatggggt tetetgatga gegtaacett 60
cagattttac atgcagtgct ctttttgatc acatacctgt tggccatcat gggcaatctg 120
ctcattatca ccatcatcac cttggaccaa cgtctgcatt ctcccatgta ctacttcttg 180
aagcacctct cttttttgga tctctgcttc atctctgtta ctgttcctca gtctattgca 240
aactcactca tgaacaatgg tttcatttct cttggtcagt gtatgcttca ggttttcttc 300
ttcatagctc tggcctcatc agaagtagct attctcacag tgatgtctta tgaccggtat 360
gttgccatct gtcggccact gcagtatgag acaattatgg atccccatgc ctgcaagtgc 420
gcagtgatag ctgtatggat ggctggagga ctatctgggc tcctacacac aggtgttaat 480
ttctcaattc ctctttgtgg gaagagaatt attcaccagt tcttctgtga cattccccaa 540
atgctaaaac tagcttqttc ttatgaattc attaatgaga ttgcagtqqc tgcatttaca 600
acatecacag cettigtetg titaatagee atagtettet cetatactea gatettetea 660
actgtgatga gaattccatc agctgatagt cggactaagg tgttctccac ctgtctacca 720
cattigting tagtcatgit citccictca gcigcagget tigaattiet aagaceteet 780
teagatteec tgteageaat ggaceteata ttetecatat tetacaetgt gataceteea 840
acactcaatc cactcatcta cagcttgagg aatgaggcca tgaaagcagc tctgaggaaa 900
gtgttgtcaa aagaagaatt ttctcggaga atggtatatg ttaaagctat attcaatctc 960
<210> 1228
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR218-9
<400> 1228
atgatagtgg aaaacataac cacaatgaga ggattcctcc tcatgggatt ctctgacaac 60
catgagetge agatettaca ggetttgete ttettggtga catacetatt gggeteagea 120
gggaacgtca tcattatcac catcacaaca ctagacccac agctccagtc tccaatgtat 180
tactttctga agcacctttc cattctggac ctctcatccc tctctgtcac agttccccag 240
tatgttgaca tttgcctgac acagagtggc tacatttcat atgcacagtg catgctgcag 300
atatttttct tcacaggttt tgcttggggt gaggtggcca ttctcacagt gatgtcatat 360
gateggtatg tagetgtttg tettecaett caetatgaag teateatggg teecageaag 420
```

```
tgtaggtggg ctgtgacagc tgtatggcta agcagtgtca ttccaggaac cctgtatata 480
gcatccatat tctctatcag attctgtggg gacagaataa tccaccaatt cttctgtgat 540
qtcccccaqq tgctcaagtt ctcctgctct gatgattacc ttgtaacagt tggagtggct 600
gatttcctgt ctgcagtggc ctttgcctgc ttcattggga ttgtcaactc ctatgtccac 660
atattctcca cagttctcag gatgccctct gctgaaagca ggtctaaggt cttctctact 720
tgcctgcccc atctttttgt tgtcttattg ttcctttcta caggcatctt tgcatatcta 780
aacccaacct cagactetee aactgettta cagtttttgg tetetatett ttacacagta 840
ttacctccaa ctctcaaccc tgttatttat agtctgagaa atgagacgat aaaaagtgtt 900
                                                                  936
ataaggaagt tactattgag ttcaaaattc actggt
<210> 1229
<211> 990
<212> DNA
<213> Mus musculus
<220>
<223> MOR263-10
<400> 1229
atgatttgct gtcctttctt tcaggagatg agtatcaact gctctctgtg gcaggagaac 60
agettgtctg tcaaacgett tgcatttgcc aagttetetg aggteeetgg agaatgette 120
ctcctgttca ccctcatcct cctcatgttc ttagtatcac tgacaggaaa ttcactcata 180
gcccttgcca tctgcaccag tgcagcccta cataccccaa tgtacttctt tctggccaat 240
ttgtctctcc tggagatcgg ctacacttgc tctgtcatac ccaagatgtt acagagcctt 300
gtaagtgagg cccgagggat ctcacgggaa gggtgtgcca cacagatgtt tttctttata 360
ttctttggta taactgagtg ctgtctattg gcagccatgg cttttgaccg ctacatggcc 420
atatgctccc cactccacta tgcaacacga atgagtcgtg gggtatgtgc ccatttggcc 480
atagtttcat ggggaatggg atgtatagta gggttgggac agaccaattt tattttctcg 540
ttgaacttct gtggaccctg tgagatagac cacttcttct gtgaccttcc acctgtcctg 600
gcacttgcct gtggagatac atcccaaaat gaggctgcaa tttttgtggc ggcagtcctc 660
tgcatattta gtccattttt gctgattatt tcttcctatg tcagaattct gattgcagtg 720
ctggtaatgc cctcacgtga ggggcgccat aaagctctct ccacctgttc ttcccatcta 780
cttqtaqtca cactcttcta tqqctcaacq tctgccacct atttgaggcc caaatctgat 840
cactcaccag aagtggataa actcttggcc cttttctaca cagcggtgac atccatgctg 900
aaccccatca totatagott aaggaacaag gaagtgaagg cagcactgag aaaaacactg 960
                                                                   990
agtctgaaga aagttctgat aatgaatagg
<210> 1230
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR218-10
<400> 1230
atgataatgg aaaatataac cacaatgagt ggattcctcc tcatgggatt ctctgacaac 60
catgagetge agatettaea ggetgtgete ttettggtga catacetagt eggeteagea 120
gggaatgtca teattateae cateacaaca etggaceeae ageteeagte tecaatgtat 180
tactttctga agcaactttc cattctggac ctctcatccc tctctgtcac agtccctcag 240
tatgttgaca gttccctggc acgaagtggc tacatttcat atgggcagtg catgctgcag 300
atatttttct ttacatggtt tgcctggggt gagatggcca ttctcacagt gatgtcatat 360
gategttata tagetgtttg cetteetete caetatgaga teateatgtg teecagaaag 420
tgtaggtggg ctgtgacagc tgtatggcta agcagcagta ttccaggaac cctatatcta 480
gcaaccatat tttctattag aatctgtagg gccaaaataa ttcaccaatt cttctgtgat 540
gtcccccage tgctcaaget etectgetet aatgattace ttgtaataat gggagtgget 600
gacttcctgt cagtaatagg ttttgcctgc ttcgttggga ttgtcatctc ctatgtccac 660
```

```
atatteteca eagtteteag gatgeeetet getgaaagea ggtetaaggt ettetetaet 720
tgcttgccqc acctgtttqt tgtctcattg tttctttcta caggcatctt tgcatatcta 780
aacccaacct cagactttcc aactgcttta gagttcttat tttctgtctt ttatacagta 840
ctacctccaa ctctcaaccc tgttatttac agtttgagaa atgatgccat aaagagtgtt 900
gtaaggaagt tactgttgag tagaaaattc actagt
<210> 1231
<211> 942
<212> DNA
<213> Mus musculus
<220>
<223> MOR218-11P
<400> 1231
atgataatgg aaaatataac cacgatgagt ggatteetee teatgggatt etetgacaac 60
cgtgagctgc agatcttaca ggctttgctc ttcttggtga catacctagt cggctcagca 120
gggaactgca tcattatcac catcacaaca ctagacccac agctcaagtc tccaatgtat 180
tactttctga agcacctttc tattctggac ctctcatcac tctctgtcac agttccccag 240
tatgttgaca gttccctggc acgaagtggc tacatttctt atgaacagtg catgctgcag 300
attettttet ttacatgttt tgeetgggat gagatggeea tteteacagt gatgteatat 360
gategttatg tagetgtttg cetteetete cactatgagg teatcatgag teccagaaag 420
tgcacttggg ctttggcagc tgtgtggcta agtggaggtg tctcaggaac actatacaca 480
gcaagtacac tetetateag attetgtggg gacagaataa teeaceaatt ettttgtgat 540
gtcccccagg tgctcaagct ctcctgctct aatgattacc ttgtaacaat tggagttgct 600
aatateetgt etgeagtgge etttgettge tteattggga ttgteatete etatgteeae 660
atatteteca cagtteteag gatgeeetet getgaaagea ggtataaggt ettetetaet 720
tgcctgcccc atctttttgt tgtctcattg tttctttcta caagcacctt tgcatatcta 780
aacccaaccg cagactetec aactgettta gagttettat tttetateet ttacacagta 840
ctacctccaa ctatcaatcc tgttatttac agtttgagaa atgagacaat aaagagggtt 900
gtaaggaagt tactgtcgag tacaaaattc actgtttaga at
<210> 1232
<211> 991
<212> DNA
<213> Mus musculus
<220>
<223> MOR263-11
<400> 1232
atgatttgct gtcctttctt tcaggagatg agtgtcaact gctctctgtg gcaggagaac 60
aagttgtctg tcaaacactt tgcatttgcc aagttctctg aggttcctga agaatgcttc 120
ctcctgttta ccctcattct cctcatgttc ttagtatcac tgacaggcaa tgcacttata 180
actettgeca tatgeaceag tecageceta cacacececa tgtaettett tetggecaae 240
ttgtctctcc tggagatcgg ctacacttgt tctgtcatac cgaagatgtt gcagaacctt 300
gtaagtgaga teegaggtat etetegggaa gggtgtgeea cacagatgtt tttetttata 360
ttctttggta taactgagtg ctgtctattg gcagccatgg cctttgaccg ctacatggcc 420
atatgetece cactecacta tgeaaceega atgagtegtg aggtatgtge ceatttggea 480
ttagtttcat ggggaatggg atgtatagta gggttgggac agaccaattt tattttctcc 540
ttgaacttct gtggaccatg tgagatagac cacttcttct gtgaccttcc acctgtcctg 600
gcacttqcct gtgqagatac atcccaaaat gaggctgcaa tctttgtgac agtagttctc 660
tgcatatcta gcccattttt gttgatcatt tattcctatg tcagaatttt gtttgcagtg 720
ctggtgatgc cttcacctga ggggcgccat aaagctctct ccacctgttc ctcccatcta 780
cttgtagtca cattgttcta tggctcagca tctattacct acttgaggcc caagtctagc 840
cactcaccag gaatagataa actcttggcc cttttctaca ccgcggtgac attccatgct 900
gaaccccatc atctatagct taaggaacaa ggaagtgaag gcagcactga gaagaactct 960
```

tttgctgaga cttgggaact caggatecta ctcagegtge tgtteetget ggtgtacatg 120 ggaageetgt tagggaacet taccateate attgetacta eagttgacea gacactgaac 180 acacccatgt acttcttcct caggaatctg tccatcttag acatgtgcta catttctgtc 240 actgtqccca atgcttqtat caactctctc actgaccaca qgaacatttc tgtqqctqqa 300 tgtgtagcac aggtcttttt ggtcttattt tgtgcggctg tagagattca gtttcttacc 360 atcatggece aggacegeta tgtggecata tgcaageete teetetacee tatgattatg 420 aaccatcaat actgcattca gatgacactg gcttccctac ttacctctct tatccttgca 480 agtgtccata cttccaaaac tttccagctg tccttttgtc actctaaagt aattccgcat 540 ttcttctgtg acatcccctc tttgctgagg ctttcttgct ctgacacctt taacaacaaa 600 ctcttacttc ttctgactgc cattggtctc agtggtagct gctttacctt cattgctata 660 tcatatgete geatattate agetgtgttg aaggtteetg teaaaggaga gagaggaaaa 720 qccttttcca cttqtqtccc tcacattatt qtqqtttctq tqtttcttag ttctqctqcc 780 tatgtgtatc taagacctcc agtagtaaca ttggaagtag ttcaggagat gacactttct 840 gtgttctata ccattgttcc accattctta aatcctatca tctatagtct tagaaacaga 900 948 cagataaagg aggctgtgaa gaaagtagta ttaagaatta ctttcata

<210> 1234 <211> 969 <212> DNA <213> Mus musculus <220>

<223> MOR219-4

<400> 1234

atggaagact ctagcatgtc caatgacact agaataacag ggttcatcct tatgggattc 60 teggetgete etgaactaca gaetgtatgt gggetgttet ttetggtaat gtaegttgea 120 gtcataatga gtaacctcct cctcatcaca ctcatcaccc tggatctgaa actccaaaca 180 cctatgtact ttttcttgaa gaatttgtcc ctgttggata tcttctttat ttctgtacca 240 atcccaaatt tctttatcaa tagcataact cacaataact caatttctat tctgggttgt 300 gccctccaag tgtttttaat gacttctttt gcatctgggg atgtatttgt tctaacagca 360 atgtcatatg accactatgt tgccatctgc tgtcccctac actatgagac catcatgagt 420 agtggtaact gtgtgctgat ggtgggtgtt tcctgggcta ttggagtact ctttggagct 480 ttatacacag ctggcacatt ttccatgcct ttctgtggct ccattgtgat cccacagttt 540 ttctgtgatg ttccctcatt gttaaggatc tcctgctctg acatacttgt ggtcatttat 600 acaagtettg gaatgggtgt ttgtetggge atgtettgtt teatetgegt tgtgatetet 660 tacttttaca ttttctccac tqtqctqaaq attcctacca ctaaaqqtca qtccaaaqca 720 tttgccacct gcctccccca tctcactgtt ttcagtgttt tcattgttac agcttgcttt 780 gtctatctga agccaccctc agttgtacca tcaatttcag acaggctgtt ttctgtgcta 840 cacactgtgt tgcctccagc acttaatcct gtgatttaca gcctgagaaa tagtgatgtc 900 aagcgtgctt tgaagaggtt gcaacaaaat ctctgtccaa gtggttcact tcatgtaaca 960 969 attcaaagt

<210> 1235 <211> 957

```
<212> DNA
<213> Mus musculus
<220>
<223> MOR219-5
<400> 1235
atgctcaatg ccactagaat aacagggttc atccttatgg gattctcggt tgctcctgaa 60
ctacagactg tatgtgggct gttcttgctg gtaatgtacc tagcagtcat aatgagtaac 120
ctacttetea teaegeteat caccetggat etgaaactee aaacaceeat gtaettttte 180
ttgaagaatt tgtccctgtt ggatgtattc tttatttctg ttccaatccc aaatttcttt 240
atcaatagca taactcacaa taactcaatt tctattctgg gttgtgccct ccaattgttt 300
ttaatqactt cttttqqaqc tqqaqacqta tttqtcctaa caqccatqtc atatqaccqc 360
tatgttgcca tctgctgtcc cctacactat gagaccatca tgagtagtgg taactgtgtg 420
ctgatggtgg gtgtttcctg ggctactgga attctgtttg gagctttata cacagctggc 480
acattttcca tgcctttctg tggctccatg gtgatcccac agtttttctg tgatgttccc 540
tcattqttaa qqatctcctq ctctqacaca cttqtqqtca tttatataaq tcttqqaatt 600
ggtttttgtc tgggcatggt ttgtatcata tgtgttgtgc tctcttactt ttacattttc 660
tocactgtgc tgaagattcc taccactaaa ggtcagtcca aagcatttgg cacctgtatc 720
ccccatctca ctgttttcag tgttttcatt gctactgctt gctttgtcaa tctgaagcca 780
ccctcacgtt cagcatcaat tgcagacagt ctgttttctg tgctatatac tgtgttgcct 840
ccagcactta atcctgtgat ttacagcctg agaaatactg atgtcaagtg tgctttgagg 900
957
<210> 1236
<211> 930
<212> DNA
<213> Mus musculus
<220>
<223> MOR223-8
<400> 1236
atgcaaagcg gcaaccaaac ctctgtgtct cacttcattc tggtgggcct gcaccaccca 60
cctcagctcg gggtaccact cttcctagca ttccttgtca tctacctcct cactgtctct 120
ggcaatgggc tcatcatcct cactgtcttg gtggacatcc ggctccaccg gcccatgtac 180
tggttcctat gtcacctctc cttcttagac ctgaccatct cttctgctat tgtcccaaag 240
atgctatctg gctttctttt ggatagtaga atcatctcct ttgggggctg tgtgattcag 300
ctgttttctt tccatttcct gggctgcact gaatgctttc tttacacact catggcttat 360
gaccgattct tggccatctg caagccttta cactatgcta ccatcatgac tcgcagcgtc 420
tgtaactacc ttgctttggg cacctggatt ggagggacta tccactcact tttccaaacg 480
agtttcatat tcaggctgcc tttctgcggc ccaaaccgag ttgactactt cttctgtgac 540
atcoctgccg ttctccgtct agtctgcgca gacaccacca tcaatgagtt ggtcaccttt 600
gtagacattg gcttcctggc cctcacctgc tttatgctca tcctcacttc ctatggctac 660
atcgtggctg ccattctgcg aatccggtct gcagatgggc gccgcaatgc cttctctacc 720
tgtgctgccc acctcacggt ggtcatcgtc tactatgtgc cctgtacctt catttaccta 780
eggeetgget caeaggagee actggatggg gtggtagetg tettetaeae agteattaet 840
cccttactta accccatcat ctatacacta cgaaacaaac agatgaaggc agctttgagg 900
                                                                 930
aggctgggag gtctcaggga ggtgcacccc
<210> 1237
<211> 943
<212> DNA
<213> Mus musculus
<220>
<223> MOR224-11
```

```
<400> 1237
atgaggaacc acacctctgt gacagagttc atcctgctgg gaatttccaa cagtgaagga 60
aggactagag agcatgctgt ttgccctgtt cctggtcttc tatgtctttg ccttgctggg 120
gaacctgete atetteetea ceatectgge tteteceaae etecaeaee ecatgtattt 180
cttcctgggg aacctggcag tgtttgacat attctttcct tctgtgaatt ctcctaagat 240
gatggactac ctagtacggc aaggccgaac catctcatac cagggttgtg tctcccaagt 300
cttcttctat cacactctgg gtggcacaga atgttttcta tatacagtga tggcttatga 360
ccgctttgtg gctatttgtc accctatgag atacacagtc attatgaacc acagggtgtg 420
tacctgcctc acactgggca cttgggttgg aggctttgtc catgggagca tcctcacatt 480
tettatettt aagttaeeet aetgtggtee gaataaggtg aacagtttet tetgtgaeat 540
tcctgtggtg ctgtccctgg catgtgcaga tacctctcta gcaagaactg tgagttttac 600
caatgttggt gtcgttgcgc tcacatgttt tcttctcatt ctcacttctt acactcgtat 660
tgtgatetee atectgaaaa teegateete ggaaggeagg egeagageet tetegaeetg 720
cagtgcccac ctgacatcta tcatcttggt gtatggcccc gtgattcttg tgtatctcag 780
acctgcttct agtccctggt tggattctgt tgttcaggtg tttaacaatg tcatcacacc 840
ctctttgaac cctctgattt acaccctgag gaacaaggat gtgaaattag ccctgaagaa 900
ggtggtatct caaggggccc agcctttagg ttataaggaa tag
<210> 1238
<211> 943
<212> DNA
<213> Mus musculus
<220>
<223> MOR283-12P
<400> 1238
atggaagtet gtaactecae ettgagaagt ggetteatet tgatgggtat tttggatgae 60
aatgattttc cagaactgct ctgtgctact atcacagccc tgtacctttt agctttgaca 120
agcaatggac tactgctgct ggtcatcacc atggatgccc ggctccacgt gcccatgtat 180
cttctgctct ggcaactctc tctcatggac ctgctcctca catcagtcat cactccaaag 240
gccatactag attatettet caaagacaac actateteat ttgggggatg tgccetteag 300
atqttcctqq ctttqacact tqqtactqca qaqqacctcc ttctqtcctt tatqqcctat 360
gacaggtatg tggccatttg tcatcctctg aactacacaa ttctaatgag tcagaaagtc 420
tgctgtctca tgatagccac ttcatggagt cttgcatctc tcagtgctct aggatatagc 480
atgtatacca tgcaatatcc tttctgcaag tccaggcaga tcaggcatct cttctgtgag 540
attecteect tgctaaaget ggeetgtgea gacaceteea catatgaact catggtttat 600
ctgatgggtg tgaccttgct ctttccagct cttgctgcca tcctggcctc ctactcacta 660
attotattca ctgtgctgca catgccctct aatgagggca ggaggaaagc ccttgtcacc 720
tgctcttccc atctgactgt ggttgggatg tggtttggga ggtgctattg tcatgtatgt 780
attacccagt tccttccaca gccccaaaca agacaatatc agctcagttt tttatacaat 840
tttcactccg gctttgaatc ccctcatcta cagcctaagg aataaggagg tcactggagc 900
tttgaggaga gtccttggga aaagtttggt cagtacagtc tac
<210> 1239
<211> 947
<212> DNA
<213> Mus musculus
<220>
<223> MOR206-6
<400> 1239
atgtacacct ggaatcacac aaatatgcca gactttatcc tcatgggatt gacagactcc 60
aaagaaatac agctgatcct ctctgtactg tttctcctga tatacctagt cactgttctg 120
gggaacatag gcatgatatt gatcatctat atagatactc agcttcacac tccaatgtat 180
```

```
tttttcctta cccatctgtc agtagttgac ctcagttatt caactgccat cacaccgaaa 240
acgttagaga acatgctaac aacaaacaag agcatttcct acaccaattg tttcgcacaa 300
ctgtacattt tcatcctctt agcagctact gaatgttttt tgctttcctc aatggcctat 360
gaccgctaca tagctatctg caacccttta cattacccag ttattatgtc tccacgatgc 420
tgccttgctc tccttactgg gtcctatgta attggagctg tggattccac tctaactgtg 480
tttagcatga ttacactaca tttctgcaaa tccaatgtca tccgtcattt ttattgtgac 540
acateteeae ttetatetet gtettgeagt gacacacatg tagttgaaat cattatatte 600
atttttgcag gttccacaat cctggggtcc cttatcacaa tatctggatc ctatgtatcc 660
attetteta etattttgaa tataaattet aetteaggaa ageagaaage etttteeaet 720
tgtgcctctc atctcctcgg agtgactgtt ttttacagca ctctgatttt tacttattta 780
aagccaacta agtcctattc tttgggaaag gaagaagtgg cgtctgtttt ctatactatt 840
gtgatcccat gctgaaccca ctaatttata gtctcagaaa caaagaggtc aaaagtgctg 900
ttgttagatt agtaaagacg agacaaggat ccaggaagtt aatttaa
<210> 1240
<211> 951
<212> DNA
<213> Mus musculus
<220>
<223> MOR197-1
<400> 1240
atgaaggcat actcagaggc taagcacaat ggcactgagg caactgagtt cattcttctg 60
ggactaagca cacgaccaga gctgcagcca attcttttt tggtattcct cacaatttac 120
ctcatcacac tgactgggaa ctttggcatg atcttattaa tcaggttcac tcctcagctg 180
caaaccccca tgtatttttt cctgacacac ttggcatgtg tggatatttt ttactcaaca 240
aatgtetete eteagatget tgteaatttt etatetgaga agaagaetat ttettacatt 300
ggatgtctga ctcagtgctt tgtttttgtc actctgctgt taactgaata ttacatgctg 360
ggtgccatgg cctatgacag atacatggca atatgcaaac ccctacatta cagcacaaaa 420
atgtcccggc cagtttgcat ttgcctggtt acattccctt acttctgggg tagtatggtg 480
ggcacaatgc aggtgatatt gacttcacgt ctatcctttt gtggacccaa caccatcaac 540
cacttctact gtgctgaccc tcccctcttg atgttaacct gttctgacac ttatatcaag 600
caaactgccc tctttgtgtc agctgggatt aatcttacag gttcccttct cattatcctc 660
atctcctaca tttttatctt catcaccatc atgaggatcc gttccagtga agggcaacga 720
aaggetttet etacetgtgg eteacacetg acagetgtta etatgtteta tggtteeete 780
ttctgcatgt acctgagacc agcaaatgag aggtctgttg agcaaggcaa aattatagca 840
gtattttgta tttttgtgag tcccatggtg aatccattta tctacagcct gagaaacaag 900
gatgtgaagc aggctctgag aagagtgttt ataagaaatc tctgcaaagt g
                                                                  951
<210> 1241
<211> 941
<212> DNA
<213> Mus musculus
<220>
<223> MOR175-9
<400> 1241
atggaagaaa agaatcagac tgtcatgcct gagtttctct tccgtggcat tacagataac 60
ctccatcaga agattgtcat cttcatcatt ttttctttgt ttatcttgtt actcttgggg 120
gtaatgtggg gatgatcact ctcatatggt tggaccccag gctgcacaca cctatgtact 180
tttttctcag ccaactgtcc tttgtagatg tgtcttcctc ttcttccata gctcccaaga 240
tgctgtgtga catttttgca aggaacaaag ccatctcttt tgtgggctgt gcaacacaga 300
tgtggttctt tggtctcttt gtggcaactg aatgctttct cctggctgcc atggcatatg 360
atoggtatgc agocatatgt aagocottgc tgtacacact tattatgtct ccacatotot 420
gtatgttgtt ggttgttggg atttatttca ttgctcttat aagtacaatg atacacacaa 480
```

```
ctttgacctt ttgcttacca ttctgtggtc catatattat caaccacttt ttctgtgatg 540
tttctccatt gctgtctcta gcatgtactg acacgcagat gattaagttg gtgttttttg 600
tettqqctqq cacaqtaqqt atqttcactq qtctqataat tetqqqgtcc tatqtatqca 660
tettgaagge aattttgaag atteagaeag eeaatgggag acaaaaaagee tteteaactt 720
gttcctctca cttggtgact gtcgctatcc tgtatgggac tcttttcttc atctatgttc 780
gacccaatgc cagttcctcc ttgaatatta ataaagtgat ctctttattt tacactgtgg 840
tgatccccat gttgaatccc ctcatctaca gcttgaggaa ccaagaggta aaaaatgcat 900
tcaggagaac tttgaagaag aagcacttcc taataggtgt t
<210> 1242
<211> 945
<212> DNA
<213> Mus musculus
<220>
<223> MOR143-2
<400> 1242
atggaaatag agaaccacac acttataaca aaatttctca tcctgggtct ctctgatgac 60
cctgaattgc aacctattct ctttggattg ttcttgtcca tgtatctggt cacgctgctt 120
gggaatttgc ttattatctt ggctgtcagt tctgactctc acctccataa acccatgtat 180
ttcctcctct ccaatctgtc ctttattgat atctgtttta tttcaacgac aataccaaag 240
atgctagtga acatgcagtc acagataaaa gacatctcct atatagaatg ccttacacag 300
qtatttttt ttaatatttt tgctggaatg gataattttt tactcacttt aatggcttat 360
gatcgctttg tagccatctg tcacccctc aactacactg ttattatgaa ccctcgactg 420
tgtgcacttc tgattctgat gttttggatc ataatgttct gggtgtccct gattcatgtt 480
ctgttgatga atgaactgaa cttctccaga ggcactgaaa ttccacattt cttctgtgaa 540
ctggctcaag ttctcaaggt atccaactct gacaatcatg tcaataatgt cttcatgtat 600
qtaqtqactt ccttactqqq tqtqattcct atgacaggaa tccttatgtc ttactcacag 660
attiteteat cettatitag gatgteetet aetgtgagta agtacaaage tittiteeace 720
tgcggttctc acctctgtgt ggtcacttta ttttatgggt caggatttgg agtttacttc 780
agetettetg tggtteatte tacteagaga agaaaggttg etteattgat gtataetgtg 840
atcaqcccca tgctqaaccc cttcatctat acgctaagaa acaaagatgt gaagggcgcc 900
                                                                   945
cttggaaaac ttttcaacag agttgcttct tcaccatcat gtatc
<210> 1243
<211> 954
<212> DNA
<213> Mus musculus
<220>
<223> MOR110-10
<400> 1243
atgaagaacc aatctgtaga gattatattc attttacttg gactgacaga tgaccctcag 60
ctacaaattc tgattttcct gtttctgttt ttcaattaca tcttgagcct gatgggaaac 120
ttagtgatca tccttctcac cctgctggat cctcgcctca agactccaat gtacttcttc 180
ctccqqaatt tctccttctt aqaaattqca ttcacaactg cctgtattcc acggttcttg 240
atgagcattc tcactggaga cagaacaatt tcctacaatg cttgtgcagc tcagttcttc 300
ttottttete tattactagt cacagagtte taceteetgg etgecatgte etatgacega 360
tatgtagcca tctgcagacc actgcactac cccatcatca tgaacaacag aatgtgtcac 420
ctactggtcc tcagctgctg ggtgactggg ttcttaatca tcttaccccc tttagtgttg 480
ggactcaaac tggatttctg tgcctctaaa acaatagacc acttcctgtg tgacacttct 540
cctctcctgc aactgtcttg tacagacaca catttcatgg aattgatggc ttttgtcata 600
gctctcatga cacttgtcat caccttgatc ttagttattc tttcctacac actcattatc 660
aaaaccatcc taaaqttccc ttcagctcaa caaaqqaaaa aggccttttc cacctgctcc 720
tcacacatgg ttgttgtctc cattacttat gggagttgta tcttcatgta catgaaaaca 780
```

```
tcagccaagg agagggtagc tttaaataaa ggtgtctctg tactcaacac ctctgtggca 840
cctttgctaa accctttcat ttacacccta aggaaccagc aggtaaagga tgcttttaag 900
caggtgcttc accgactgta ttctcacaac agtgaattaa gatttagacc taaa
<210> 1244
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR114-12
<400> 1244
atgagaaacc acacttcaat tacaacattc atcctcctgg gactcactga tgatcctcag 60
ctgcaggtct tgctttttat ttttctattt atcacctacc tattgagtgt aactggtaac 120
ttaactatca ttaccctcac tacagtggat ccctacctta aaactccaat gtatttcttc 180
ctccaaaatt tctctttcct agaaatctca tttacaagtg cctgtgtccc aagattctta 240
tacagtattt caactggaga cagaacaatt acatacaatg catgtgcaac tcaactattt 300
tttacagatc tctttggggt aactgaattt tttcttctgg ctatcatgtc atatgaccgc 360
tacgtggcca tctgtaaacc tttgcattat atgaccatca tgaacaacaa ggtgtgcaga 420
ataatggtta teteetgttg gatggeagea tteatgatta teeteecace eetgagtttg 480
gggtttcacc tggaattctg tgactctaat atcattgatc attttggatg tgatgcaaac 540
cctattttga aaatatcgtg ctcagacacg tggttaattg agcagatggt aataggctcg 600
gcagtattga ccttcatcat tactcttcta tgtgtagtct tttcatacat gtacatcata 660
aggacagttc taaaattccc ttctgcccaa caaaagagaa aggccttttc tacctgctct 720
tcacacatga ttgtggtttc catcacctat ggcagctgca tcttcatcta cgtcaaaccg 780
tctgcaaaag aagcggtgac cattaataaa ggtgtgtctg tgcttatttc ttccatatca 840
cccatgctga atcctttcat atatactcta aggaacaagc aagttaaaca agcttctcag 900
gacttaatta agaaaattgc atttctctta aagaag
<210> 1245
<211> 941
<212> DNA
<213> Mus musculus
<220>
<223> MOR110-11P
<400> 1245
atgaaaaatc agtcaatgga atttgactta ttcttttggg attgacagat gacccacaat 60
tacaaattgt agtttttctg tttctctttc tcaattatgt gatgagcctg gtggggaact 120
taatcattgt gcttctcacc ctgctggacc ctcgcctcaa aactccaatg tatttctttc 180
teegtaattt eteettittg gaaateatgt teacaacagt gtgtatteec agattettga 240
cgaccattgt gactggagac aaaactatta cttataataa ttgtgcagct cagttgtttt 300
teattetttt getgggagte acagaatttt ateteetgge tgeeatgtee tatgaceget 360
atgttgccat ctgcagacca ctgcactacc ctatcatcat gaacagcaaa gtgtgccacc 420
aactegteet cageteetgg gtgaetggat tettgateat ettteeceea ttggeeatgg 480
gtttgaaget ggatttetgt gatteeagga taattgatea ttteatgtgt gaaacttete 540
ctattttaca gatctcctgc acagacactc atgttctaga aatgatgtcc tttgtcttag 600
cagtggtgac acttgtagtc acactggtac tagtgagtct ctcttactct ttcatcatta 660
agactattat gagtttccct tctgcacage aaagaaccaa agecttctcc acctgcactt 720
cccacatgtt tgttgtctcc ataacatatg gaagttgtat cttcatgtat attaaaccat 780
ctgcaaggga gagagtgtct gtgtctaaag gtgtagctct gctgtatact tcaatcgccc 840
ctctcctgaa ccccttcatt tatacactaa qaaaccagca qqtqaaaqaa qtcttctqqq 900
atgtattaca aaagactttg ggcttttcaa aacacaaatt t
                                                                   941
```

```
<211> 939
<212> DNA
<213> Mus musculus
<220>
<223> MOR130-2
<400> 1246
atggagaagg aaaaccaaac cagcgtctct gagtttctcc tcctgggttt ttcaagttgg 60
ccagggcatc aagggcttct ctttgcactc ttcctatgtc tctatttaac aggactattt 120
ggaaacctcc tcatcttgtt agccattggt tcaaacaatc acctccacac acctatgtat 180
ttcttccttq ccaatttqtc cttqqtaqac ctctqccttc cttcaqctac aqtccccaag 240
atgctattga acatccaaac caagtctcag tccatctcct accctggatg cctggctcag 300
atgtatttct gtatgatgtt tgctaacatg gacaacttcc ttctcactgt gatggcatac 360
tgcacatctc tggtggcttt ctcttgggtc attgccactt ttaatcctct cttgcatacc 480
ctcatgatgg cccgacttca tttctgctct gaaaatatta tccaccattt cttctgtgac 540
atcaactete teeteetet eteetgttet gataceagte teaateagtt gatggttetg 600
tctgtggtgg gcctgatatt tgtggtacca tcagtttgta tcttagcttc ttatggtcgc 660
attgtctctg ctgtgatgaa aattacttca atggaaggaa agctcaaagc attctcaacc 720
tgtggatccc accttgcttt ggttattctt ttttatggag ccattgcagg aatctatatg 780
agcccttcat ccaaccattc cactgaaaaa gattcagctg catcagtaat ttttatggtt 840
gtagcccccg tattgaatcc tttcatttac agcttaagga acaatgagct gaaagggact 900
ttaaaaaaga ctcttggcca gagcaaaata tgttccaag
                                                               . 939
<210> 1247
<211> 840
<212> DNA
<213> Mus musculus
<220>
<223> MOR174-17P
<400> 1247
ctgttaacat tgatggggaa cctgggcata cttgtggtta taaaggttaa ccccaaactt 60
cacactecea tgtacttttt tettaaceae etateatttt tggatatatg ttattetagt 120
gtatttacac ccaaactttt gcagatattg attatggaag atgggaccat ttcttttata 180
ggatgcatga tacaattttt ctttatttgt acattcgtga ttacagaaat attcatgtta 240
gcagtgatgg cttatgacag gtttgtggct gtttgcaatc ccctatacta cacattaatt 300
gtaatqccta tacaattctg tqctctqcta qttqctqqqa catatatqat caqtqqacta 360
tgtactttga taattctata tactcttttg caactctgtt attttgaaca tggcatcatc 420
aatcactttg getgtgaata etetgetgte atetetgtgt ettgetetga tteeteettt 480
agccagttga tatgcttagt catgtctatt gctagtgaat tttctagtgt cctgatcact 540
ttagcctcat atgtgttcat agttgtcact attataaaga tgccttccaa aggaggacta 600
cagaaageet tetecacetg taetteecac etgactgeea taacaatttt eeatgggate 660
ttactactcc tgtactgtat tcccaactca aacagctcac ggctctttgt caaagtggcc 720
actgctcttt atacaatcat gatccccatg ttgaaccccc ttatctatag ccttagaaat 780
aaagatgtga aggacacagt caggagactt atcagctcaa aactgcactc tcacttgaca 840
<210> 1248
<211> 939
<212> DNA
<213> Mus musculus
<220>
<223> MOR174-18
```

```
<400> 1248
ctctatagca ttcaagaaaa ccagagttct acagtgacct tcatcctcgt gggcttctca 60
gaatacccag acatccagtt gcccctgttc ctcctgttcc tgaccatata cacagtcact 120
gtgctgggga acctgggcat gattgccatc atcagactta gccctaagct ccacactccc 180
atgtattttt ttcttagtca tctctccttt gtggatttct gttactccac tgttgtcaca 240
ccaaagctct tagaaaactt gattgtggaa gacagaagga tctcctttac aggctgtgtc 300
atgcaattct tctttgtatg catatttgtg gtgacagaaa cattcatgtt ggcagtgatg 360
aagetttget ggteeetggt ageaggatee tatteatggg gtataatetg tteetttgta 480
ttcatacatt ttatgttgac cttggtcttc tgtgggacca agttcataaa taactttgtg 540
tgtgagcatg atgccattgt cgctgtatcc tgctctgacc ccttcattag tcagaaggtc 600
attiticatet tigeaactit caatgageta ageagtetga tgateattet caectettat 660
gttttcattg tcatcactgt catgaaaatg cctaccactg gagggcgcta caaagtcttc 720
tocacttgtg cotoccatot cactaccato actattttoc atagcattat tatotgtoto 780
tactgtgttc ccactaccaa aagttcttgg cttctggtca tggtggcctc agtcttctac 840
acagttgtca tccccatgct gaacccactt atatacagtc tcaggaacaa ggatgtgaag 900
gatgcagtta agaaactaat gtgttcttct ttgtcatca
<210> 1249
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR174-19
<400> 1249
caactcaggg accgaggaaa tcagactaat tcagtgatct tcattctgtt gggcttctct 60
gaatacccqq atctgcaqqt qcccctqttc ttcgtqtttc tqatcatata cacaatcact 120
gtactqqqaa acctqqqtat qattqqcatc atcaqqatca atacaaaqct ccqcaqtacc 180
cccatqtact ttttccttag tcatctttcc tttqtqqatt tctqttactc tactqttqta 240
acacccaaac tgttagaaaa cttgatcata gaagacagaa ccatctcttt ctcaggctgt 300
attatacagt tottotttgc atgtacattt gtggtgaccg aaacgtacat gctggcagtg 360
atggcctatg acagatttgt tgcagtgtgt aatcctctgc tctacactgt tgccatgtcc 420
ccaaagctgt gttccatttt agtgggtgcc tcatattctt ggggtttaat ctgttccttg 480
acacttactt actttttgct gagattatcc tttcaaggta ttaatataat taataatttt 540
gtgtgtgage atgetgetat tgtggetgta teetgeagtg accettaeat tagteaggaa 600
attatttttq tctctqcctc atttaatqaa ataaqcaqcc taattattat tcttacttcc 660
tatgttttca tcttcatcac tgtcatgaag atgtcttcca ttggaggccg aagtaaagct 720
ttctctacat gtgcttccca cctgactgcc attattattt ttcatggaac aattctattt 780
ctctactgtg tacctaacac aaagagttct tggctcatgg tcaaggtggc ctcagtgttc 840
tataccgtct tcatccctat gttaaacccc ttgatctata gtctcagaaa caaagatgtc 900
aaggagtcag tcagaaagtt ggtgaccaaa agttta
                                                                 936
<210> 1250
<211> 939
<212> DNA
<213> Mus musculus
<220>
<223> MOR149-3
<400> 1250
atggaacctg gaaaccaaac aggtgcatat tacttttatc tgactgagct aaccagtgat 60
cctacaatqq aqctcctcat atttaqcctc ttcttqttta tatatctqqt cacaattctq 120
ggaaatttgc tcatcatcat tgctgtcagc tctgactctc atctacaaac accaatgtat 180
```

```
cactttetet ecaaaettte atttgetgae atetgeetaa geacaaetae eatteeaaat 240
atgctgaaga acattcacac acaggatcag agcatcagtt acacaggttg cctcattcag 300
gcctgctttg ttctgaattt tgctttagta gaaagctgta tccttgctgc aatggcctat 360
gaccgctatg cagctatttg tcatcccctg aactacacag taattatgaa tccccacttc 420
tgtgatctgc taattctact gtccctgatc attagtattg tgaacagctt attacagtgt 480
ctgatgatac tgcgactatc attttgcaca aataatgaac ttcctctgtt cttctgtgag 540
cttgctcaag tcatcaagct tgcctgttct gatactctca tcaattatat cctcatatat 600
cttgcaacat ttatatttgg tggaattcca atctttggaa tcattttctc ttatactcga 660
attgtttctt ctattttgaa aatatcttcc cttagaggaa agtacaaagc cttttctact 720
tgtgggtctc acctttcagt tgtctcgtta ttttatggtg caggagttgg agtttatatt 780
agetetteaa ttgetgtttt ceeteagaca actacagtgt catatattat gtacacagtg 840
ctccctcaaa tgttgaaccc ttttatctat agcttaagga ataaagatat gaaagaagcc 900
ttacgaaagc tcattgctaa ggaatcaaga cttccctga
                                                                  939
<210> 1251
<211> 927
<212> DNA
<213> Mus musculus
<220>
<223> MOR250-7
<400> 1251
gtgttattga atcacacatt tatcactgaa tttctcctct tgggggtgac agacatacaa 60
gaattgaacc ctattctttt tgtcatggtc cttgccatgt actttataaa tgtgtttggg 120
aatggagcca tcatgatgat tgtcatcttg gattcaagac tctactcacc tatgtatttc 180
ttcctgggaa acctagcatg tctagatatc tgcttctcca ctgtaacagt gccaaagatg 240
ctagagaact tetteteeac aageaaagea attteettet tgggatgeat aacteaactt 300
cattlettee actiettggg atgtacagat geeetgetgt tgacagteat ggeatttgae 360
cgctttgtgg ctatctgcag accactccac tacccttcca tcatgaaccg tcaggtctgc 420
attcaggtgg ctgctaccat atgggcaatt ccttttcttc atgcactggt tcactccata 480
atgacgtctc aattgaactt ttgtggttcc aaccgcatcc atcatttctt ctgtgatgtt 540
aagccattat tggagctggc atgtggaaac actgaactca acaggtggct gctcaatact 600
cttgcaggga ccattggtat tggcctcttc tttctgacat ttttatccta tttctacatt 660
gtcacctate tetttetgaa gacteattee tgcagcatge tgcacaaage actgtecace 720
tgtgcctctc acttcatggt tgtcatgatt ttctatgctc ctgttctctt tatctatatc 780
aatcctgatt cagggagctc cctggaaaag gacaggatca ttgctgtcat gtacactgtg 840
gtcacccctg cactcaaccc acttatctat gctctgagga acaaggaagt gaggtgtgct 900
ttgaatagga aactcaggat actgatt
                                                                  927
<210> 1252
<211> 915
<212> DNA
<213> Mus musculus
<220>
<223> MOR160-4
<400> 1252
atgaggaacc acagcgctgt ccatgagttt gttcttctag gactatccac cgaccccac 60
atteaacetg cactetttgt cetgtteett etggtttace teeteacegt ggtggggaac 120
tecetgatgt tgettgtgat tgtggeegat teceaeetee acacacetat gtaettette 180
ctgagacage tgtccttcct ggatetetgt cacteetetg teaeggegee caagatgete 240
gagaatctac tctctgagga gaaaaccatc ttggttgaaa gctgcttggc tcaggccttc 300
ttegtetteg ceaeeggegg caeegaggee tgtetgettg cagegatgge etatgaeege 360
tacgttgcca tcggttcccc tttgctctac agccaggtga tgagtagcca gctctgtgtg 420
gggctggtgt ggctctcctg gtgtctggct gttgtggatg ctctcctcaa taccctcccg 480
```

```
gctgtcagtt tagatttctg tgaggaccaa acgatttctc acttcagctg tgagctgtct 540
tetetettee etetgtettg etetgaeace geegeeaact teacacteet getetgetee 600
teegtegtge attitetitgg aacgetigte atgatigtit getetlatgg cegeatigte 660
accactgtcc tgagggtcag ctccagcacg gggagaagca aggccttctc cacctgtttg 720
teccatetea etacegteat ettgttetat ggeteggggt ttateagtta tetettaceg 780
gcttcagggt ccccctgga gaaggtcttc tctctgcagt acagcgtcat cacccccatg 840
ctgaaccccc tcatctacag cctgaagaac aaggaggtga aggcagcgct gggaagaatg 900
atcagaaagc atttt
                                                                 915
<210> 1253
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR160-5
<400> 1253
atggcctgga gcaaccacag cgtcatcacg gagttcgttc tcaccgggct ctctgacgac 60
cccctqatcc aggctctact tttcgcgctg ttcctgggga tttacgtcct caccatgacg 120
gggaacctga cgatgctgct ggtgatcacg gctgactccc acctccacac gcccatgtac 180
ttetteetaa gtaacetgte etteetggat etetgettet eateegteae ggtaeegaag 240
ctgctgaagg acctgctgtc tgctaagaaa accatctctg tagagggctg cctggctcag 300
gtcttcttcg tqttcatcac tqcqqqaacc qaaqcctttc ttctqtcaat gatqqcqtac 360
gaccgctacg cggctgtctg ccacccgcta ctctatgggc agatgatgag caacgaactc 420
ctcttggcgg tgaacctgga cttctgcgag gcctacacca tacaccacta cacgtgtgag 540
ttaccetete tettteettt gtettgetea gatateteea teaaegtgga catettgate 600
tgctctaccc tgctgcacgg gctggggacc tttctcccaa tcttcttttc ttatgcccgc 660
attgtatcca ccgtgctgag catggaatcc accacgggga gaagcaaggc gtttaacacc 720
tgctcttctc acctcatage cgtggtcctg tttttcgggt ccggcttgat tcgttatctt 780
atgcccacat etggetette tetggaettg etetetteet tgcagtacag egcagteacg 840
cccatgctaa atcccctcat ctacagcctg aagaaccagg aggtgaaggc cgctgtgaga 900
                                                                 936
aggacattag ggaagtgcct gcgatacttg gagtga
<210> 1254
<211> 951
<212> DNA
<213> Mus musculus
<220>
<223> MOR224-12
<400> 1254
atgaacatga caaacaacac tatggtgaca gaattcacct tgctgggcat ccctgagaca 60
gagggeetgg agaatgteet actetteetg tteteaacat tatatgeetg tgeettgetg 120
ggaaacttgc teettettae tgeagteace teeteeceae gaeteeaeae acceatgtae 180
tttttcttga gcaacctctc tatctctgac atgggcttct gttccactac agctcccaag 240
atgttgtcat atctctcagg aaggggtggg gggatttctt tccagggatg tgttgtacaa 300
cattlettet atcattgtat tggatgegtt ttgtgettee tgtacacagt gatggeetat 360
gategetttg ttgccatatg ettecetttg agatacaeaa teateatgaa eeacagagta 420
tgctgtgtct tggccacagg gacctggatg agtggctgtg tgcatgccac catcctaact 480
tgcctcactt tccagttgcc ctactgtggc cccagtgagg tgagttatta cttctgtgac 540
atgeetgeag tgttactget ageetgtgaa gatteetete tageacagag ggtaggttte 600
acaaatgttg gtcttttatc tctcatttgt ttctttctca ttgttgtgtc ctacactcga 660
attgggatet ceateteaaa aateegetea acagaaggea ggeagagage gtteteeace 720
tgcagtgctc acctcacagc catcatgtgt gtctatggac cagtcatcgt catctaccta 780
```

```
cageceaace ecageceatt gettagtgea attatteaga tttteaacaa tettgtgaca 840
cccaccatca acccattgat ctacagcctg aggaacaagg atgtgaaagc agccctgagg 900
catgtatttc ttaagagatg tcttagcctg gaagtaaatg aaaacatcta a
<210> 1255
<211> 948
<212> DNA
<213> Mus musculus
<220>
<223> MOR102-2
<400> 1255
ctgagcccgg agaattccag caccatcacc gagctagtcc ttgtggggtt ttctgatcaa 60
ccccagactg agetteetet ettegtette ttetetetgg tetacetage cagetgtttg 120
gggaatacag ctgtggtcat attagtggct ctcgatgtct ctctgcagac acccatgtat 180
ttcttcctct gccacctagc tttcctcaat ggattcttcg gcacggttgt gactccaaag 240
atgctcttca atttccttgc aagcaggaag gtcatatctt acccattctg cctggctcag 300
acctacctca ccctgttctt ggagtcgacc gagtgctttc tccttgccgt gatggccata 360
gategetacg tggccatetg etacecactg aggtacette teateatgag etgggeagtg 420
tgcatagcac tggcagtggc cgtgtgggtc acaggttttt gtgcctcggt tttacctctc 480
tgcttcatga tcctcccact ctgtggccct tacgttgttg attatctttt ctgtgagctg 540
cccatccttc tgcacctgtt ctgtgcagat acgtctctgc aggaggccat gatggccgtt 600
ggaggggctg gcacagtgct ggttcccttc ctcctgattg cgctctccta ccttcgcatc 660
ctggtgactg tgataagaat agactcggct gaggggagaa agaaggcctt ttcaacctgt 720
gcctcgcact tggctgtggt gaccatctat tacggaacgg ggctcatcag gtacttgagg 780
cccaagtccc tttactccgc cgagggagac aaactgatct ctgtgttcta tgcggtcatc 840
ggaccegege tgaatecatt catetacage etgeggaaca aggaagtgea gggegetgtg 900
aggagagtgg tggagagata caggaaaagc ccaagaattg ccttctag
<210> 1256
<211> 933
<212> DNA
<213> Mus musculus
<220>
<223> MOR267-15
<400> 1256
atgggcaatc acagcacagt gactacattc cttctgtggg gtttttccag cttcccagag 60
ctacacaatc tactctttqt tqtqattctc ctctcccatg tqactattct tctagcaaat 120
gcatccatca tggtggccat caagctcaat cacaaccttc acacccccat gtactttttc 180
ctctttgccc tgtccttttc agaaacatgc accactatgg tgattttgcc ccgaatgtta 240
gtggacttgc tatcagagag caaggccatc tctctccctg aatgtgctac ccagatgttt 300
ttcttctttg gactagctgc caacaactgt ttcatcatgg ctgccatgtc ctatgaccgt 360
tacactgcca tccacagccc actgcattat catatettta tgaccccaaa ggtctgctct 420
cagctggtaa tagcttcctg tgttgttggg ttcctttgtt ctcttagcat caccttcact 480
atattcaact tgtctttctg tgactccaag actatccagc actttttctg tgatatttca 540
cccctqqttc accttqcctq tqattacact qctcatcatq caatqattat ttttatqqtc 600
tctgcatttg tgctggtggg cagctttgtt ttaatcatga tttcctatgc cttcatagta 660
ttccttgttg taaaaatgcc ttctgtacag gggaggcata aggctttctc aacgtgctcc 720
teceaectea cagttgttte tatgeaetat ggatttgeet getttgteta ettgataece 780
aagaacagtg acteetteeg tgaagacatg etgatggetg teaegtatae agtaetgaea 840
cctctgctca atcccattgt ttacagccta agaaacaaag aaatgcagac agccctgagg 900
aaggtactaa gcagtatcaa taaaatgtta cct
                                                                  933
```

```
<211> 969
<212> DNA
<213> Mus musculus
<220>
<223> MOR246-6
<400> 1257
atggataaca ccaattattc agtggtgtct gagtttgtgt tacttggact ctctagttct 60
cgggaacttc agattttcta ctttqttttc ttctctatqc tttatattqt catcatatta 120
ggaaaccttc tcatcatcat agctgtgact tctgacagca gcctgcactc accgatgtat 180
ttcctcctgg gaaacctttc cttttttgac atttgtcagg cttcttttgc tacacctaaa 240
atgattqtag actttctqag tqaacacaag actatatcat tcagtggctg catagcccaa 300
atttttttca ttcacctctt tacaggagga gagatggtaa tcctagtttc catggcctat 360
gatagatatg tggccatatg caaacctcta cattatatga ccatcatgaa ccaaactaca 420
tgtactgcct tggtagtaat ctcttgggct gtgggcttgg tacacacatt gagccagtta 480
tcatttactq taaaactqtc attttqtqqa cccaatqaaq taqacaqctt tttttqtqat 540
cttcctcgag tggtcaaact cgcctgcatt gactcataca ttactgaaat acttattgtg 600
gtaaacagtg gaattettte ettaageact ttetetetet tagtgagete etatgteata 660
attettgtea cagtttggtt caagteetet getgeeatgg ceaaggeatt ttetacactg 720
gctgctcaca tcatggtagt agtattattc tttggtcctt gcatcttcat ttatgtgtgg 780
ccatttacta cctatcctgt ggataaaatt cttgctatat tttatacagt tttcactccg 840
atccttaatc ccattattta cacactaaga aatagagaca tgaaagctgt catgggaaaa 900
attgctgctc attatctcag acctcccaaa gtagctgaaa tgtcatttgt agccagaatt 960
tctctttat
<210> 1258
<211> 966
<212> DNA
<213> Mus musculus
<220>
<223> MOR208-4
<400> 1258
atggccacag ctgtccacag aaatggaagc cttactccag tgtccttgca ggccttcgtg 60
ctggtgggat ttgggggagg tgcagagacc caggccctgc tctttgctgt cttccttqtc 120
ctgtacatgg tgaccgtcct gggcaacctc accatgattg tggtcatcac cctggatgcc 180
egectgeact ecceeatgta ettetteete aagaacetgt eetttgttga ettetgetae 240
tectetgtea ttgececcaa ageaatggee aacttetatt eetecaaagt cattggagtt 300
gctggttgtg ctgcacagct gtttttcttc tcctttctgg gaacaagtga ggctttactt 360
cttgctgtga tggcctatga ccgcttcatg qccatctqca gtcctctqca ctacccaqtq 420
accatgteet ceacagtetg tgettgeett gtgetggetg cetaetttgg aggttgeete 480
aactocattg tggagaccag cotcactttt caacttooot totgtggoto caatcacato 540
gaccatttct tctgtgatgt gccccgcta ctccagattg cctgtgccaa cacctctgtc 600
aatgagetgg taatgtttge catetgtggt tteattetaa tgggggeaae attagteate 660
ctgatttcat atggctacat cactgtgacc atcctcagca tgcactcggg atccaggagg 720
cacaaggtct tctctacctg tggctcccat ttgacagctg tgtccttgtt ttatggaact 780
gggattqcta tatatgqcca qccaggaggt ttgqcatcta aagagcaagg caaggtggtc 840
tocatottot acaccotqqt catcocottq otcaaccoco toatotacaq totqcqqaac 900
aaggatgtga aggatgccct ggagaggctg agacagagac agagacagaa acatgcagct 960
atataa
                                                                   966
<210> 1259
<211> 957
<212> DNA
<213> Mus musculus
```

```
<220>
<223> MOR208-5
<400> 1259
atggccacag cagtgcacag aaatggaagc ctcactccag tgtccctgcg agtgtttgtg 60
ctggtgggat ttgggggagg tgcactgacc caggccctgc tctttgctgt cttccttgtc 120
ctgtacgtgg tgactgtcct gggcaacctc accatgatcg tggtcatcac cctggatgcc 180
egectgeact ecceeatgta ettetteete aagaacetgt eetttgtega eetetgttae 240
tectetgeca ttgecectaa tgecetggee aactttetet eeaceteeaa agteateage 300
tttgaggett gtgccactca gttettette tttteettgt tggctaceae tgagaettte 360
ctcttagctg tgatggccta tgatcgtttc atggccatct gcagtcccct gaggtaccct 420
gtgaccatgt gccctacaac ctgtacccgt ctggtcctgg gtaccttctg tgtgggctgc 480
ctgaactcca ttgtgcagac cagcctcacg ttccagctgc ccttctgcag ctccaaccgt 540
attgaccact totactgtga tgtgcccca ctgcttcagc tggcctgcgc cagcacggct 600
ctcaatgaac tetttetett eggeetetgt gggtteatea ttgtgageac cacettaget 660
gtcctggttt cctatggcta catcaccgtg accatcctca ggatgcactc gggatctggg 720
aggcacaagg tettetecac etgtggetet cacetgacag eggtgtettt gttttatggg 780
acticatitty toatgtatgc acagocaggt gototgacat coatggagca gggcaaagtg 840
gtctccatct tctacactct ggtcatcccc atgctcaacc ccctcatcta cagtctacgc 900
aacaaggatg tgaaagatgc tctgcagagg ttaggacaga gacacagcct tgtgaag
<210> 1260
<211> 942
<212> DNA
<213> Mus musculus
<220>
<223> MOR256-49
<400> 1260
atgggcacag tttgcaatga cacccatggt gatttcatcc tccgtggctt ctctgacaag 60
ccatatttag agaaggtact ttttggggta attttggtct tttattgttt gactcttgct 120
ggaaatacaa tcataatatt tgtttccttg aaggacccaa aactacagat ccctatgtat 180
ttcttccttt ccaatctttc cttattagat atttgtttca ccagcagctg tgttcctcag 240
atgttggtta atttgagaag tccaaagaaa actatcacct atagtggctg tgccactcag 300
ctctacatct tcctgtggct tggtgccact gaatgtgtgc ttcttgttgt catggccgtg 360
gaccgctatg tggcagtgtg ccatcctctg agatatgtaa ctgtcatgca ccctaaagta 420
tgtctgcagc tggctgtcct tgcttggggt tctggcttga ttcagtctct gatccaatct 480
actgctaccc tcaggttgcc cttttgctct cagcgggtag tagataacat tgtgtgtgaa 540
gttccagccc tgattcagct gtccagtgca gatactacct acaatgaagt gcagatgtcc 600
atagccagtg ttatcctcct agtgttaccc ttggccatta tcctttcctc ctatggtgct 660
attgtgaaat ctgttttgaa gataaagtca cctgcagggc agaaaaaagc atttggcacc 720
tgtacttctc accttcttgt tgtttccctg ttctatggta cagtaacagg tgtctatctt 780
caacccaaga ctcactatgc tcatgaatgg ggaaagtttc tcacactttt ctacactgta 840
ataactccaa ctcttaaccc tctcatttat acactgaaga acaaggaggt aaaagaagca 900
gtgataagac tgtggtggaa gacttggatt tcacaaagat aa
                                                                  942
<210> 1261
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR280-1
```

```
<400> 1261
atggcagagg agetetggaa teatteetee etgteeaget teateettge eggeetgtte 60
ggccactcac cttatgactc tttcttcttc tccctggttc ttctggcctt tggggctgct 120
gtggttggta acatecteet ettgatggte atecaggtgg atagaegeet geacaceeee 180
atgtacttct tcctcagtca gctctccatc atggacttga ctatgacatg cacagtggta 240
cccaagatgg caaccaactt tctctcaggc gggaagctca tctcgctggg aggctgtgcg 300
teteagatet tetttgtagt tactgtagga ggtgetgagt getteetett ggeegteatg 360
gcctacgata ggtatatggc tgtctgctac ccactgaggt accctgtact gatgaactgg 420
aaggeetget etttettgge caeggeatee tggatgggtg geatggeaga eagtgtgatt 480
gatgtgggtg tggtctttag ctttccctat tgtggatctc tagaggtgga ccacttcttc 540
tgtgaggttc ctgccctgtt gcgcctctcc tgtgcagaca cctcactatt tgaggacctc 600
atctatgcat gttgtgtggt gatgttactg ctgcctcttg gggtcattgt ggcatcctat 660
getegggtee teacaactgt gatgaggatg eectecactg aggggaaaca gaaggeeete 720
accacttgct cttcccacct ggccgtggtg ggcctctact acgggggagc catatttagc 780
tacatgcagc gagcctcggc tagaacacca ctgggggata gagccacctc catcttctac 840
actattgtca ccccaatgtt caacccactt atttacagtc tgaggaatag ggaggtaacc 900
agtgccctga agaagatgct ggagaggtgg ggcatg
<210> 1262
<211> 928
<212> DNA
<213> Mus musculus
<220>
<223> MOR256-50
<400> 1262
atggatagtt tcaatgccac gttagaagag agattctttt tggtgggctt ttcagattgg 60
cctcagctgg aactcatcct ttttgttttt atttcaattg tctactccct aactatcttt 120
ggcaacacta ccatcattgc tctctcccga atagaccttc gactgcacac ccccatgtac 180
ttcttcctct caaatctctc ctttctggac ctctgcttca ccaccagcac cgtgccccag 240
ctcctcatca acctctatgg acaagacagg accatcagct atggagggtg tgtggcccag 300
ctgttcatat atcttgctct gggatccact gagtgtgtgc tcctggtagt gatggctttt 360
gaccgctatg ctgctgtgtg tcgtccactg cactacacaa ccatcatgca cccccttctc 420
tgtcaggcat tggctcttgc ttcatgggta ggaggattct tgaactctct gattcaaaca 480
ggcctcatga tgaccatgcc actctgtgga catcgactga atcacttctt ctgtgagatg 540
cctgtcttcc tcaagttggc ctgccaggac acaggaggaa cagaggccaa gatgtttgtg 600
gccagagcca taatcttggt cttccctgca acattaattc ttggctccta tggacacatt 660
gctaaagcag tactaaaggt caagtcaaca gctggacgca gaaaagcttt tgggacatgt 720
gggtcccacc tcctggtggt ttccctgttt tatggctcag ccatttacac atacttgcaa 780
cccaagagca gttattctga gagtgagggg gaaatttgtg gccctttttt atactattgt 840
cacccccatg ctcaaccctc tgatctatac cctgaggaac aaggatgtga agggggctct 900
gtggaaggtg ctagggagag gcacagac
                                                                  928
<210> 1263
<211> 963
<212> DNA
<213> Mus musculus
<220>
<223> MOR217-1
<400> 1263
atgactccat ttgaaatgac caatcacaca cgtgtcacag aattcatctt cctgggattt 60
tecaaecaec ecaaectaea gggtgtette tteetggeet teetggeeat ttacetgaea 120
acteteetgg ggaacaeact catgatagtg gecaceaggg teageeetge acteeacaet 180
ccaatgtact atttcctcag caacttgagc ttcctggaca tctgctacac atctacctcc 240
```

```
attocagtoa tgotagtgaa ottottoagg gagaagaaga coatotoott tgagggotgo 300
ctctctcaga tcttcttctt tgtgtcatgt gctggaactg aatgtgtctt gttggctgcc 360
atggcatatg acceptatgt georgtttgt caccetette getatecagt teteatgage 420
acaagggtet gtateagett ggtgaetgga teetggetet gtggettggt gaattetgtg 480
actcacacag tattgacaag cacacttact ctgtgtggcc ccaaccaaat cagccacttc 540
ctctgtgatg tcccattgct cctgaaqctc tcctgctcag acacctctgt caatgaatct 600
gteeteeatg tgteeagtge eactgttgge etgagteeet geetgtteae tgeaggetee 660
tatatactga tcatctctgc catcctgagg attccctcta ctcagggcaa gagaaaggcc 720
ttctccacct gtgcctcaca cctcactgtg gtggtggttt tctttggaac agccaacttc 780
aactatgtca gacccaagga aggctactcc ctggacatgg gcatattagt gtctgtgctc 840
tactgtgttg tgaccccct gtttaatccc atcatctaca gcctgaggaa caaggaggtc 900
aaaggtgcgc tgagaaaact gactggagtg ccttccttaa caatagcagt ggctagagag 960
taa
<210> 1264
<211> 966
<212> DNA
<213> Mus musculus
<220>
<223> MOR225-12
<400> 1264
atgtggattc aactagaatt catggaaaat cataaaaaca tcacagagtt catttttatg 60
ggtctttggg agaatagaca aatagagttg ctgttctttt tcttgttcct gctttgctac 120
ctagctgtct taatggggaa ctccgtcatc tttctcacca tcacctgcag ccacctaatc 180
gaacaaccaa tgtattattt tetetgeeat ettteeetea tggaeetetg etaeeeetee 240
actgtgattc ctaggctcat cagggacttg gccgcaacaa gaaaaaacat ttcctataat 300
gagtgcatga cccagctctt cactgcccac ttqctqqcaq qtqtqqaaat cttcatcctq 360
gtgtccatgg ccttggaccg ctatgttgcc attgtcaagc ccctgcacta catggttatc 420
atgagcagga agagatgtga tatgttgatt gtcacggcct ggatactggg gttctggcac 480
tecattgett tactactgat ggtgeteagt etgecattet gtggteecaa ceacateaat 540
cactacttct gtgacattaa gccgcttttg aagctggtct gtaaagatgt tcatgttgtt 600
agtatcttag caattgttaa ctctgggatg gtgctttttg ccatttttat tgtactactt 660
gcctcttaca tactcatatt gtattctctg aggacaagat catctgcagg gaagtggaaa 720
gtactctcta cctgtagctc acacataatg gtggtagttt tattttttgg gccctgtatt 780
tatacctatg ttttacctgc aggaagtgag aacaaggata aggaaatttc tgtgttttac 840
actgtgattg ccccatcct aaatcctgtc atctacacac tgagaaacag tgagatgaaa 900
agtgccatgc acaaagtgtg gtctcggctg tcaaatttgg ggttgaaata cgtgaaacca 960
tcttgt
                                                                   966
<210> 1265
<211> 936
<212> DNA
<213> Mus musculus
<220>
<223> MOR245-21
<400> 1265
atggataaag ccaatcactc tgttgtgtct gagtttgtgt tcttgggact ctccaataga 60
tggggaatcc agttgcttct cttcctcttt tcctccatgt tctacatagc gagtgtgatg 120
ggaaacctcc tcattgtgtt ctccgtgact gctgactcca acctgcattc ccccatgtac 180
ttcctgctgg ccaatctctc atttcttgac cttggagttt gctctattgc agcacccaag 240
atgatttttg acctttttag aaagcacaaa gccatctcat ttggaggttg tataactcag 300
atettettta tteatgetat tgggggeaeg gaaatggtge tteteatage eatggeettt 360
gataggtatg tagccatatg taaacctctt cactacttga ccatcatgag accacaaata 420
```

```
tgcattttaa ttttggcagt atcctgggtc cttggactta ttcactcagt ggcccaacta 480
gettttgttg tagaettgee ettetgegga eetaatatat tggaeagett ttaetgtgat 540
cttcctcagc ttattaaact tgcttgcaca gagaccagta aattggtgtt catggtcaca 600
gccaacagtg gactcatctc tgtgggctcc tttttcatac tcatcatttc ttacatcttc 660
attttggtga ctgttaggaa acactettea ggeageatag ceaaggeeet etetaetttg 720
tcagctcatg tgactgtggt ggttttgttc tttggaccac taatcttctt ctacacttgg 780
cccttccctt catcacactt agacaaattt cttgccattt ttgatgcagt tctcacccct 840
tttctgaatc cagtcatcta cacattcagg aacaaggaaa tgaaggcagc aatgaggaaa 900
ctctgctccc agcttgtgaa ttacaggaag gtctcc
                                                                  936
<210> 1266
<211> 897
<212> DNA
<213> Mus musculus
<220>
<223> MOR245-22
<400> 1266
tccaaactat 'tcctttttgt cttctcttcc atgttttatg tagcaagcat gacaggaaac 60
teteteattg tetteaetgt ggeatetgae eeteatttae aeteteeaat gtaetttetg 120
ttggctaacc tgtcttttat tgacttaggt gtatcttctg ttattgcccc caagatgatt 180
tatgatetet ttagaaagea taaagteate tettttagag gttgtgteae teaaatette 240
ttcattcatt tcatcggtgg tgtggagatg gttttactca tagccatggc ctttgacaga 300
tatgtggcca tatgtaaacc tcttcattat ctaatcatta tgaggccaag gatgtgcatc 360
ttgtttatag tggcctcctg ggtggttggc tttatgcatt ctctggttca actggctttt 420
gtagtaaact taccattctg tggaccaaat gtgttggaca gtttctattg tgactttccc 480
eggtteatea aacttgeetg tatagacaea tacagaetga agttactggt ettagteaae 540
agtggattca tgtcggttgg gtccttcttc atattgatca tttcctatgt tgtcattata 600
tttattqtcc ataaacactc ttcaaqtqqt tcctccaaqq ctttqtctac actttcaqct 660
catgttatgg tggttgtctt attctttggt cctgtgatgt tcatctatac atggccttct 720
totttaacac atttggataa attoctacct atatttgatg caatcgtcac tocotttctg 780
aacccagtga totatacatt caggaatcaa gaaatgaaaa tggcaatgat gagagtactt 840
agacagataa tgggttacag acaaattatt aaacacttgc accctgatca gtcttaa
<210> 1267
<211> 870
<212> DNA
<213> Mus musculus
<220>
<223> MOR245-23
<400> 1267
aatatccaac tgctgctctt tctgttatcc tcagtgttgt atgtggcaag catgatggga 60
aactgtetea taatttteae tgtggettet gacceteage tacattetee tatgtacttt 120
cttctqtcta acctctcctt cattqatata qqtatttctt ctqccacttc acccaaqatq 180
atttatgact tattcaaaaa gaacaaagtc atctccttta gaggttgtat tattcaaatc 240
ttcttcatcc atgcaattgg gggtgtggag atggtgctgc tcattgccat ggcctttgat 300
agatatgtgg ccatatgtaa qcctcttcat tacctgacca tgatgagccc ccagatgtgc 360
atcttctttt taattactgc ctgggtagtt ggtcttatgc actctgtgat acaactggtt 420
ttcatagtaa atttacctct ctgtggtcag ctattggaca gcttctactg tgaccttcct 480
caattcatca aacttqcttq catqqacaca tataqactqq aattaatqqt ctcaatcaqt 540
agtggattca tgtctgtggc tttcttcttc atactgatca tttcctatgt tgtcatcata 600
tttactgttc tgaaacactc ttcaagtggt tcctacaaag cgctgtctac actttcagct 660
```

```
cacgtgactg tagtagtett attetttggt cetgecatat ttttetatae atggeettet 720
tectetacae acetggataa gtttetggee etatttgatg eagttgttae tecetttttg 780
aaccctgtga tctacacatt gaggaatcaa gaaatgaaga tggcaatgag gagagtattc 840
agacatctaa tgggctatag acaaatctct
<210> 1268
<211> 930
<212> DNA
<213> Mus musculus
<220>
<223> MOR261-13
<400> 1268
atgacagaga accagacatg gatcccagaa tttaccctgc agggattcct cctcagcccg 60
cggatgcaga tgctcctctg tggcctcttc tccctgctct atactttcac tctgctgggg 120
aacqqaqtca ttctqqqqct catctqqctt qactqcaqac tccacacccc catqtacttc 180
tttctctccc acctggccat cgtcgatatt tcatatgcta ccaacaatgt ccccaagatg 240
ttggcaaacc ttcttgctaa gaaaaaatct atttcttttg ccccatgtat aatgcagaca 300
tttttataca tggcttttgc tcacactgag tgtctcatcc tggtgatgat gtcctatgat 360
cggtatgccg ccatctgcca accettacaa tactctgtca tcatgagctg gaaagtgtgc 420
accattatgg ctgttgcttc ttgggcatgt ggctccctcc tagccctggt ccacgttgtt 480
cttatectga ggetgecatt ttgtgggete catgaaatea accaettett etgtgaaata 540
ttatctgtcc ttáagttggt ctgtgctgac acaacactca accaaattgt catctttgca 600
ggttctgtat ttatcttagt gggaccactg tgctttgtgc tggtttccta cacacqtatc 660
ctgattgcca tcctgaagat ccagtcaggg gagggtcgca gaaaggcctt ctcgacctgt 720
tecteceace tetgtgtggt egggetette tttggeagtg ceategteat gtacatggee 780
cccaagtccc agcacccaga aactcagcag aaggttcttt ccttgtttta cagccttttc 840
aaccccatgt tgaatcccct gatctacagc ctgaggaatg ctgaggtcaa gggtgctgtg 900
aagagagtgt tgtggaaaca gagatcaaga
                                                                  930
<210> 1269
<211> 924
<212> DNA
<213> Mus musculus
<220>
<223> MOR171-46
<400> 1269
atggccactg ggaatcattc tgcagcagtt gtgtttgttt tggtgggatt aacacagcag 60
cetgagetee tgetgeecet etteattetg tteetgggea tetatgtggt gaeageagtg 120
gggaacctgg gcatgatcct gctcatcaca gtcagcccac tgctgcatac tcccatgtac 180
tatttcctca gcagcttatc ctttgttgat ctctcctatt ccactgtcat tacacccaaa 240
atgctggtga actttcttgg gaagaaaaat ttcatcactt attcggagtg catggctcag 300
ttctttttct ttgcggtctt tgtggtcact gagggttacc tcctgactgt tatggcgtat 360
gatcactacg tggccatctg cagaccattg ctgtataatg tgatgatgtc ctctaaacac 420
tgcttactgt tagtgctagt tgccttcacc ctaggccttt tttctgctgt agtacacaca 480
agtgctatga tgagtctgaa cttctgtaaa acctacatca taagtcatta cttctgtgat 540
getetteete teeteaaact tteetgetet aacacacate teaatgaget teteatattt 600
attattggag ggatcaacac cttggtgccc accctagctg ttgccatttc ctatgtcttc 660
atcttctgca gcatccgtca catcaagtca tcaaaqaqca qqtccaaaqc ctttqqaacc 720
tgcagctctc atctcatggc tgtggggatc ttctttgggt ctatcacttt catgtattta 780
aagcettett caagtaacte tetggageaa gagaaggtgt ettetgtgtt etacaceaca 840
gtgatcccca tgctgaaccc attaatatac agtttgagga acaaaqatgt gaagaaagca 900
ctgggcagat tctctgtaag aaga
                                                                  924
```

```
<210> 1270
<211> 954
<212> DNA
<213> Mus musculus
<220>
<223> MOR223-9
<400> 1270
atgagaagaa acagaaacac atcgctggac gatgtggtga cagatttcct tctcctgggc 60
ttggctcacc ccccaaatct aagagccttc ctcttcctgg tcttcttcct catttacatc 120
ctgacacage tggggaacct geteatectg etcactgtgt gggetgacce caagetgeat 180
geoegeecea tqtacattet tetqqqtqtq eteteettee tqqacatqtq qeteteetea 240
gtcattgttc ctcggattat attaaacttc actcccgcca gcaaggttat cgcatttggt 300
ggttgtgcag ctcaactata ttttttccac ttcctaggca gcacccagtg cttcctctac 360
actttgatgg cctatgacag gtacctggca atatgccagc ctcttcgcta ccctgtgctt 420
atgaatggga agttgtgcac aattctagtg tctggagctt gggtggctgg ctccatccat 480
qqqtctattc aaqccactct qaccttccqa ttqccctact gtqgqcccaa ggaagtqgac 540
tacttettet gtgacattee tgeagtgetg agaetggeet gtgeegatae gaetgteaat 600
qaactqqtqa cctttqtqqa cattqqqqta qtqqctqcca gttqcttcat gctgattctg 660
ctctcctatg ccaacatagt tcatgccatc ctgaagatac gcactgccga tggcaggaag 720
eqtqccttct ccacctqtqq ctcccatctc actqtqqtca ccqtctacta tqtcccctqt 780
attttcatct accttcgggc aggttccaag agtccctttg atggagcagt tgctgtattt 840
tacactqttq tcactccatt actgaatccc ctcatctaca ccctgaggaa ccaggaagtg 900
aagtctgccc tgaagaggct aagagcaggt agaagggatg tggatggaga gaag
<210> 1271
<211> 933
<212> DNA
<213> Mus musculus
<220>
<223> MOR256-51
<400> 1271
atggagaaga acaatgagag ctctggggag tttattctcc tgggcttctc tgaccagccc 60
eggetggaga tggteetett tgttgtetgt aeggtetttt attttetage tgteaeagge 120
aactcaqcca tcatcttcct ctccctcatg qacctccqqc tacacacacc catgtacttc 180
ttcctcagca acctgtccct tcttgacctc tgttacagca ccagtagcat cccccagttc 240
cagattaacc tetggggeec aeggaagace ateagetteg taggatgtge tgttcagete 300
tttgccttcc tgtccgtggg gggcatcgag tgcattctcc tgtcagttat ggcctacgac 360
cgctttgtag ctgtctgcaa gccactgcat tacctgacca tcatgcaccc acagctgtgc 420
ctgaagetgg cageetttge ctggeteggt ggeacageca getegaeaet gatgteecea 480
ctgaccatgt ctctggggcg gtgtggtcat cgccgtatca accactttgt gtgcgagatg 540
ccqqctatca tccacatctc ctqtqtqqac acaaqctqqa tagaaqqcct aattttcatc 600
ctggccatcc ctattgttct tgtgcctctc attatgatcc tggtctccta cggctacatt 660
gctgccgccg tcctgaggat caagtctaca gctagtcggc gcaaggcctt caacacctgc 720
tcqtcacaca tqqcqqtqqt qtctcttttc tacaqtaqca tcatctacat qtacatqcag 780
cctggcaatt tggcaagcca ggaccagggc aagtttctaa ctctgttcta ctgcctggtg 840
acceccacge taaaccettt catetactet etgagaaaca aagacatgaa ggeggecatg 900
                                                                   933
ttgaaggttc tgggaaaaga tagaaacctg ctc
<210> 1272
<211> 928
<212> DNA
<213> Mus musculus
```

```
<220>
<223> MOR162-12
<400> 1272
atggctttag caaatgtctc ttcagtgaaa gaatttatct tgctgggctt gacacaacag 60
ccagagetee agetgeeget ettettettg tttttgggaa tetaegtggt cetetgtgat 120
ggggaacttg ggcttgattg ttctgattgt gttgaatcct cacctgcaca cccccatgta 180
ctactttctc ttcaaccttt ccttcacaga cctctgctac tcctctgcca taacccccag 240
aatgctggtg ggttttgtga agcagaatat catctctcat gcagagtgct tgactcagct 300
ctttttcttt gccttctttg ttattgatga atgctacatt ttgacagcaa tggcttatga 360
cagatatgct gccatttgta agcccctgct ttaccaggtc accatgtctc atcaggtctg 420
cctattgatg actatgggtg tgtatgtgat gggctttgct ggtgccttgt cccacatagt 480
ttqcatqctq agactcacct tctqtqatqq caacatcatc aataactacq tatqtqatqt 540
acatectete ettaaaetet eetgeteaag taceteeate aatgagetgg tactttteat 600
tgttgttggt gtcaatataa cagtgcccag cctgactctc tttgtttctt ataccttaat 660
cctttccaac atcctcagca tccattctgg ggaaggtagg tcaaaagcct tcagtacctg 720
tggctcccat gtgatagctg tttcttttt ctttggagct gcagccttca tgtatcttaa 780
qccttctagt qcatctqtqq atqaaqataa aqtatctact atcttttata ccattctqqq 840
tccaatgctg aatcctttca tctacagtat aaggaataaa gatgtccaca ttgcactgaa 900
aaaaactttg aagaaaaaga tactcacc
                                                                   928
<210> 1273
<211> 970
<212> DNA
<213> Mus musculus
<220>
<223> MOR106-13P
<400> 1273
aaatetteag cageececag caactecage accateactg ggtteateet ettgggette 60
ccctgcccca ggggagggc aaatcctcct ctttgtgctc ttctccattg tctacctcct 120
tacceteatg ggcaatgett ceateatetg egetgtgtae tgtgateaga aactteacat 180
ccccatgtac ctcctgctgg ccaacttttc tttcctggag atctggtatg tcacctccac 240
aqtececaae atqttqqeca aetteetete tqacaecaaq qteatetett tetetqqatq 300
cttcctgcag ttctatttct tcttctcctt gggttctaca gaatgctttt tcctggcagt 360
catggcattt gatcgatacc ttgctatctg caggcctcta cattaccctg ctctcatgac 420
tgggcgcctc tgcaacatcc ttgtgatcag ttgctggata cttggtttcc tctggttccc 480
tqttcccatc atcatcatct cccaqqtqtc qttctqtqqq tctaqaatta taqaccactt 540
cctqtqtqac ccaqqtcctc tqctaqcact cacttqcaaa aaatctcccc taattqaqct 600
ggtcttctct atcttaagtc ctctgcctct cattattcct tttgtcttca tcatgggatc 660
ttatactctg gtcctagcag ctgtattgaa ggtcccttca gcctctggaa aaagaaaggc 720
tttctcaacc tgtgggtctc atctggcagt ggttgcatta ttttatggct cagtactggt 780
catgtatggg agtccaacat ctgagcatga agctgggatg cagaaaattg tgactctgtt 840
ttactctqtc ttqaccccac tcctcaatcc tqtqatatat aqtcttaqqa acaaacatat 900
gaagatagcc ctgaaggaaa ttctgaggaa gattaaaaat tggtcaacaa aaaaggcctt 960
                                                                   970
gggcaattaa
<210> 1274
<211> 967
<212> DNA
<213> Mus musculus
<220>
<223> MOR128-3
```

<400> 1274

```
atggcaccag aaaaccaaac aacagtcttg gaattccatc tcatgggact ctcagaggat 60
ccagacttac agaccatcct ctttggactg ttcctgtcca tgtatctggt cactgtcttc 120
ggaaacctgc tcatcatcct agccatcata tcagactctc acctgcacac acccatgtac 180
ttetteetet geaacetgte eetggttgae atetttttt getecaetae tgtteeeaag 240
atgctagtga acatccagac ccagagcaga gctatctctt tcacaggctg tcttgtccaa 300
atgtatgcct ttcacctctt tgggactata gacagcttcc ttctggcagt gatggccatt 360
gacaggetgg tggccattgc ctacccactc cgctactcag tgctcatgag cccacatgtc 420
tgcgcactac tggtgggtgg gacatgggtt attactaatc tccagtcctt ggtacacact 480
tgtctcatgg ctcaactaac cttctgtgca agatcagaaa tccctcactt cttctgtgac 540
cttatgcccc tcctgaaact ctcctgctca gatacacaca tcaatgagct ggtgatcttt 600
gcttttggca ttgtcatggg cctcagccca ctgtcctgca tccttgtctc ctacatctgc 660
attttcaggg cagttttcag gatcccttct gctcagggca agtggaaagc cttctctact 720
tgtggctcac acctcactgt ggtgtcactg ttctacggga ccatctttac tggatattta 780
ctgccagcat cccccagctc ctcccagaaa gacaaggcag ctgcgttaat gtttggggtg 840
gttatcccta cattaaaccc ctttatctac agcctaagga acaaggacat gaaggcagcc 900
ctgaggaagc ttggcagcaa agcagtctca ttccagtcct agtgcagagc aggagctgtg 960
tggccac
<210> 1275
<211> 967
<212> DNA
<213> Mus musculus
<220>
<223> MOR124-1
<400> 1275
atgggcccgg gaaccctcaa tgattcagga accacagagt tcctgctgct gggactgtgg 60
gccccacctt ccctgcgccc cctgctgtgg gcctcacttc ttctagccta cctcaccact 120
gtgctgggta atggtgccct agtgggtctg atagccttgg acagacgact gcatcggccc 180
atgtategee tgetgaeeca cetggeeetg etggaeacag cetatgtgag taccaegeta 240
ccgcaggcgc tggcacacat gaccatgcgc agtgcccgcc tctccctggt acgttgtggc 300
acgcagctgt acgtgggcat ctccctgggc agctgcgagg ccatcctctt ggcagcgatg 360
gccctggacc gctgcctggc tgtgtgcaga ccgctgcatt atgcgaccct ggtgaccgcc 420
ccccgctgcg cagcgctggc tggagcatcc tggacactgg gctttgcact ctctgtaccc 480
aatgeggtgg etgeactaeg cetgeeette tgteetggga gggeageggt ggaeeaette 540
ttctgtgagc tacctgcggt gctgaggaca gcgtgtgcgg acaccacagc caactacagg 600
ctggtctatg gcctgggcgt gcccatcctc ctggtacctt tggtcctcat cctagcctct 660
tacacctgga ttctggctgc tgtgcgcaag ttgccttctg ctggaagtcg ccacaaagct 720
ttgtccacct gcagctcaca tttggctgtg gtggggctct tctatggcac ggtgagtgcc 780
atgtacctgc ggcccaaagc ctctagtgat cttcctgcta gacaccataa actggtggca 840
gttttctacc tggtggtcac acctgtcctc aatccactca tactacagcc ttcgaaaccg 900
tgaggtccac atggcagctc gctatgccct ggcccggctg cgggggacgc gcattgtgtt 960
                                                                   967
gcactaa
<210> 1276
<211> 945
<212> DNA
<213> Mus musculus
<220>
<223> MOR267-16
<400> 1276
atggagtgtg taaatgacac tgtggtcaga gagtttgtct tccttggctt ctcgtctctg 60
getgagetge agetgetaet etttgeegte tteetgteee tetatttgtt eactetgage 120
accaacgctg tgattgtttc caccattgtg ctagacagag cccttcatac gcccatgtac 180
```

```
ttcttccttt ctgtcctgtc ctgttctgag acctgctaca ccttcgtcat tgtgcccaag 240
atgctggttg acttgctggc gcggaaqaag agcatctctt tcctcggctg cqccatccaa 300
atgttcacct teetetteet eggetgttet catteettee tgetggeage catgggttat 360
gategatacg tggccatttg ccaccetetg egetacaegg tgeteatggg geacagggta 420
tgcgtggggc tagtagctgc tgcgtgtgtc tgtggcttca ctgtggcaca ggtaatcaca 480
teccaggigt tiegtetace ettecgetet tecaateaae tecaceaett titetgigae 540
atttcccctg ttctccagtt ggcatctcac caccctcact ccactcagat caccatcttc 600
ctgctttgcg cgctggtctt ggttatccct ctcttgttga tcctggtatc atatattcac 660
atcatttctg ccatcctcca attcccttcc acgctgggca ggtacaaagc gttttccacc 720
tgtgcctctc acctcattgt tgtcatagtg cactatggat gtgcctcttt tatctaccta 780
aggeccaagt ccagetacte ttecagecag gatgegetga tateagtate etacactate 840
ctaactccqt tattcaatcc agtcatctac agcttaaqaa acaaaqactt caaatcaqct 900
cttcataggg taataggaag aacagttacc ctaagacaac attga
                                                                  945
<210> 1277
<211> 693
<212> DNA
<213> Mus musculus
<220>
<223> MOR182-11P
<400> 1277
tctgtgacac caaagatgct tatgaaattt ttaaataaga atgacatgat atctgtgggt 60
gagtgttttg cccaatatta ttttttttgc ttcagtgcaa ctactgaaat tttcctcctg 120
gtagcaatgg cttatgaccg ctatgtagcc atatgcaacc ctctgctcta tctagtggtg 180
atgtccaaga gactctgcac tgtgttcatc agtttatcat atataattgg tgttctaaat 240
cctatagttc atgtgggatt attattcaga ttaacattct gtaaatctaa tgttattgat 300
cattletact gtgaaatett gecaetetae acaattlett geacagatge atetetgaat 360
gcattggtaa tttttatttt tgcttcttcc atacaaatca gtacctctgt qactattata 420
gtctcttatg cccqtqtcct attttcqqtc ctqaacatga agtctqaqaa qqqcaqaaqa 480
aaagctttct ttacctgcag tgcccacctg ctctctgtct ctttgttcta tggtaccctc 540
ctcttcatgt atgtgagtca tgggtctgca ccaggtgaaa accaggataa aatgtattct 600
ctgttctaca cagttgtgat tcctctgcta aaccccttta tttacagctt aagaaacaag 660
gaggttttgt gtgctttgag aaaagtcgtt aaa
                                                                  693
<210> 1278
<211> 845
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (460)...(621)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR231-19P
<400> 1278
atgggccaga gcaacaatgt cacagaattt gtcctgctgg gcttcactca ggatcctgct 60
gggcaaaaag ctttatttgt tatgttttca ctgatgtaca ttgcaacaat ggtgggcaac 120
ctgctcatcg tagggacagt gattgccagc ccctccttgg gctccccaat gtacttcttc 180
cttgcctctc tgtcactcat ggatgctgtt tattccactg ccatctcacc caagttgatt 240
gtagacttgc tccgtgagaa aaagaccatc tccttcagag cttgcataag ccagctcttt 300
atagagcatt tgtttggtgg ggttgatatt gtcattctcg tggcaatggc ctatgatcgc 360
tatgtggcca tctgtaagcc actgcattat ttgattatca tgaatcgacg ggtatgtatt 420
```

```
cttttcttgg tgatggcctg ggtgggaggt tttgtacatn nnnnnnnnn nnnnnnnnn 480
nnnnnnnnn nnnnnnnnn ntttttctct tttttgttcc ctgtattttc atgtatgtta 660
gacctgtttc tagttttcct attgataaat ccatcactgt aatttatacc attgtcactc 720
ccatgctgaa tcctttaata tatactttga gaaattcaga gatgaaaaat tctatggaaa 780
agctcctgca gaaaatgtta agtccaaata gaataaagct ttcttcttgc tgctcatatg 840
actaa
                                                            845
<210> 1279
<211> 793
<212> DNA
<213> Mus musculus
<220>
<221> variation
<222> (323)...(379)
<223> Any nucleotide A, C, G or T
<220>
<223> MOR15-2P
<400> 1279
atgetteatg teaacateae caacaceate ttetecacet teetggttae aggeatteea 60
qqqctqqaqq caqtqtacat ctqqataqcc ataccattct qtqccatqtt tctcatcact 120
atggtgggca acatgaccat cataattgtt atctggcatg agcagactct tcatgttcct 180
atgtatetat teetggeeat gttageetee tetgatetgg gtetetetet gtttacette 240
cccacactgt tgagaatctt cctgctgaat gatagagagt tgaccaccac tgcttgtttc 300
nnnnnnnnn nnnnnnnna tgaaggccac aagtggtgcc agatccagga ttccttggat 420
ttggaattag ggatggttgt cagccaagcc atgtaggtac tgtgaacaga acttgggtct 480
tctacaaaag caatacataa tcttaactgc tgaaccatct ttacaacagg cactcttgta 540
agtttgtgtc atgaacagga tattgaattt ctcttttgtt ttctagagaa taaatccttc 600
atcaattctc atatcaqttt ctcattattt aaatacaact gcctatttat ctaatagata 660
tttagaatat taaatgtaac aatageettg tetteattgt getgtetttg ttetttaaac 720
caaqtaaqtt qtacaatctc atqcaacttt qattqaaqta qtaatqtaaq aaqaaqqtaa 780
ggatcttccc aat
                                                            793
<210> 1280
<211> 292
<212> DNA
<213> Mus musculus
<220>
<223> MOR256-52P
<400> 1280
atggagaaat ataatctcac aatggtgact gaattcatcc tggtgggcat cacttaccac 60
cctqaqtttc aggtaccatt qtttgqactq ttcctcatca tttatctqac ctcactqttt 120
ggcaacttgg gcatgatcat ccttaccatg gtggattccg ggctgcaaac acccatgtac 180
ttetttetea gaeacettge taetaetgat ettggttatt caacagetgt gggaecaaaa 240
atgttgagaa attttacttg tagatcaaaa tacaatatca tttaatgcct gt
                                                            292
<210> 1281
<211> 489
<212> DNA
<213> Mus musculus
```

```
<220>
<223> MOR202-38
<400> 1281
ttacaatctt ctgtccatgt tgctctggca ttttgtcttt ccttctgtca ttccaacgtg 60
attaatcact ttttctgtga cattccccca ctgctggaca tttcttgttc tgacacccac 120
acaaatgaga ttacactgct tgtcttggct acattggatg ttgttttcac tctcttagtt 180
atettaaaca ettacetget tatttteatt getateetga ggatgegtte agetgaagea 240
cagaggaagg cattetetac etgtgeatet cateteatea etgtgtetat ettetttggt 300
tcccttatat tcatgtactt acagcccagt ttcaatcatt ccatggacac agacaaaatt 360
qcatctqtqt tttatacaat qqtcattcct atqctqaacc ctqtqqtcta caqcctqaqq 420
ttagttgat
<210> 1282
<211> 376
<212> DNA
<213> Mus musculus
<220>
<223> MOR203-8P
<400> 1282
agettgetet getttacaaa aagetteetg ggagetetgg teetgatgea getetgagte 60
tetecacece agaggtgetg teetgeaatt eeaaaagaca ttaetaacea etgttgacaa 120
gaatagatgg atgtcttctg ctgcaggaag gaaaaaggcc ttctccacat gtgcttccca 180
cetgactgca gtcaccattt tctatgggac tctcgcctac atgtatctac accetcatac 240
caatgactet caagagcaag aaaaggcage ttetgtattt tatggcataa ttatteecat 300
gttgaacccc ttgatctata gtctgagaaa ccaagatgta atagaagcct tcaaaaagat 360
agcgaagaaa tgctta
<210> 1283
<211> 793
<212> DNA
<213> Mus musculus
<220>
<223> MOR220-4P
<400> 1283
agattgcctt tggtagggtg gccattttta ctatgttaat tctgccaacc tatgagcatt 60
ggagatgtct ccattttcta agttcttttc aatgaaagaa atgaacatac ccatgtattt 120
cctcagtatt ctgcccactt tagacatgga ctatgttttc tgtcactgtg cccaatacct 180
gtatcaacac totgagtgac cacaggaaca tttotgtagg tggattgcag cacagatott 240
tttctctata tttgcacatg tgtagagatt ctattttttt accaccatgg cccaggacca 300
ctatgtggcc atctgcaagc cactcctcta ctctgtgatc atgaaccacc ggttatgtgt 360
tcagatgaca ctggcttccc tacttagctc tcttgtcctt gcaattgttc acactttcaa 420
aatattccag ctgtccttct gttactctag tatggtccct cagttctttt gtgatatccc 480
ctttgctgag gtttcttgct ctgatacctt taacaacaaa ctcctaattc ttctgtctgc 540
cactgtggtc agtggtagct actttgtctt tcttgtcata tcatatgctc atagattatc 600
aaatgtgttg aagtttcctg tcaaaagaga gatagggaag gccttttcaa cctttgtcct 660
teactitatt giggigietg tettiettig tietgggget talgigtace taagtacatt 720
aggtaccata gtaacattag aagtaaagga gatgattett tetgtatttt ataccattge 780
tacaccattc ttt
                                                                793
```

```
<211> 589
<212> DNA
<213> Mus musculus
<220>
<223> MOR136-18P
<400> 1284
ttttttccaa atatgtgggt tgctgtttcg tactattggc aatgtccttt gtcttatagg 60
tatgtgccca tctgctatcc tctgcgctat atgtccatca agagcctgaa cctctatgtc 120
cttctagtag ttatatcctg ggcctttccc tctgccaatg cccttgtgca tatccttctc 180
ttagctcgac tatctcactt tagacacaat accatacccc tacatcttta aacgctctgc 240
cttgctgaat ctgtccagct cagaaacaat catcaatgaa ctcgtcatcc ttcctttagg 300
tacagtgatc atcettgtca cttatggcct cattagagtc acaatcetga gaacgetece 360
catcaaggga atctgcaaag ccttgtccac atgcgactct cacctctgtq agtttccttq 420
tactatggag ccattattgg gcttatatct agtcccctca tctaataaca ttaatgacaa 480
ggatgttaat gtatctgcga tatataacgt ggtcataccc atgatcaata cattaattta 540
tagtctgagg aattgggata tcatcttgag tgaggtaacc cagacctaa
<210> 1285
<211> 568
<212> DNA
<213> Mus musculus
<220>
<223> MOR255-7P
<400> 1285
tegaacecag ceteaacact catttacage acceaaatga accacateat ecagaggate 60
ttggtggcct catcgtgggt ttgttccttc agcagtgtac ttactcatac tgtggccata 120
tocacacttc acttotytyg totcaatyty ytcaataact totactytya cotycotcay 180
ctcttccaac tgtcctgctc cactacccag ctaaatgagc tgctgctctt tgcagtaggt 240
ttcctaatga cagaaacctc catggcactc atttttacct tttacatcta tggggcagtt 300
gcaattetge aaateegete tgetgaagge aggtagaaag cetteteeae atacagetet 360
cacctcactg tggttgccat attctatggc acaggtatct ttgcctacat gagtctcagg 420
tccatcaaac tttctgataa tgataaagct attgggattt tcaacactga tgatcaaccc 480
catgctaaac ccactcatct acagtctcag aaaccctgat gtgcaggctg ccctctggaa 540
ggtactcaca gggaaacagc tatcacat
                                                                   568
<210> 1286
<211> 996
<212> DNA
<213> Mus musculus
<220>
<223> MOR264-21P
<400> 1286
tttttcaaat ttaccacatc tacagatgaa gacctattca aacaagaaaa attgaatgcc 60
tccacactga tggaatttac tcttcttggg ttttctaatg ttcctcattt gcagtgggtg 120
ctgtttatgg tatttttgtt tatgtatatg acaattctgt tgtqcaacag cattataata 180
gtgttagcaa aaactgaccc tgctctccag actcctatgt attttttcct tagcaacttt 240
tettttttgg aaatetgtta tgtaacaget actattecaa gaatgettat ggatetatat 300
acactaaaag gaaacattte tgtgtttgee tgtgeaacae aaatgtattt tgteettatg 360
ttgggagcca cagagtgcct cttgctagca gctatggcct atgatcgtta tgtggctatc 420
tgccaccctc tccaatattc tttacttatg aagaataaag tgtgtttaca gctggtagct 480
gcctcctgga tcagtgggat tccagtagaa attgggcaga cctaccagat attctccctt 540
```

```
cacttttgtg cttctaacag aatagatcac tttttctgtg acatcccccc acttctcaag 600
cttgcttgtg gtgacacctt tatgaataca gttgcagtgt atgttgttgc agtggtgttt 660
gttatggttc catttctgct aatcattgtc tcctacatca agattatctg caacattatg 720
aaactgtctt cagccaaagg gatggccaag gctttttcca cctgctcgtc tcacctgata 780
gttgtaatct tgttctatgg aacagcaagc attacttact tacagcccaa acaaagtcag 840
tcagaaggaa tgggggaaga tgctgtctct tttctacacc attttgatcc cagctttgaa 900
teetattata tacagtetga gggaacaaag atateatgat gggeaetgag aaaattacae 960
                                                                  996
agtaagttac tgatatggtg ggaaaacgta aaatag
<210> 1287
<211> 893
<212> DNA
<213> Mus musculus
<220>
<223> MOR231-20P
<400> 1287
atgggccaga gcaacaatgt cacagaattt gtcctgctgg gcttcactca ggatcctgct 60
gggcaaaaag ctttatttgt tatgttttca ctgatgtaca ttgcaacaat ggtgggcaac 120
ctgctcatcg taggaacagt gattgccagc ccctccttgg gctccccaat gtacttcttc 180
cttgcctctc tgtcactcat ggatgctgtt tattccactg ccatctcacc caagttgatt 240
gtagacttgc tccgtgagaa aaagaccatc tccttcagag cttgcataag ccagctcttt 300
atagageatt tgtttggtgg ggttgatatt gteatteteg tggeaatgge etatgatege 360
tatgtggcca tctgtaagcc actgcattat ttgattatca tgaatcgacg ggtatgtatt 420
cttttcttgg tgatggcctg ggtgggaggt tttgtacatg ctttgtttca agttctcgct 480
gtatataatc ttcctttctg cggtcccaat atcattgacc actttggctg tgacatatac 540
ccactattac tactttgcat gtactgatac ctatttcatt ggtcttttct gtcattggca 600
ataatggagc aatgtgtata gtcatcttca ttctcctcct actctcctat ggaataatcc 660
ttagatetet caagaateae agteaggaag ggaggegeaa agetetgtee acetgtggtt 720
cccatatcac tgtggttttt ctcttttttg ttccatgtat tttcatgtat gttagacctg 780
tttctagttt tcctattgat aaattcatca ctgtaattta taccattgtt actcccatgt 840
tgaatccttt aatatatact ttgagaaatt cagaaatgaa aaattctagg aaa
<210> 1288
<211> 962
<212> DNA
<213> Mus musculus
<220>
<223>
     MOR286-3P
<400> 1288
teccagacag cagaceegaa gaacageage ageaetgtga etgagtteat eetegtggge 60
tttgagcaga gctccccttc cacacgggca ttgctcttca ccctcttcct ggctctctac 120
agectegeca tggecatgaa tggeeteate atetteatea eatggaetga eeceaggete 180
aacageeeca tgtaettett eettggacae etgtetttee tggaegtetg etteateaee 240
accaccatce egeagatgtt ggtecatetg gtgaccaaga accacactgt etectttgte 300
tettgeatga eccagatgta ettggtettt etagtgggtg tggeegagtg eateeteett 360
ggettteatg geetatgate gttatgttge catetgeeae eeaetgaaet atgeeeagat 420
catgagecag aaaggtgtgt gteaggetgg tgtgttette etggatettt gggatggtea 480
atggtatett tettgagtat atateattea ggaateeett etgeaaagae aaceaeatag 540
agaacttett etgtgagget eccatagtga tegetetete etgeggggae etcaagttea 600
ccatgaagtt gatetttgtg gatgecattg tggtgttget caqteccatg gtgeteatea 660
teacetecta tgeeegeate etggeeteea teeteeaeag ggeeteetee teaageeata 720
ggaagacett ttetaettgt geeteeeace tgaetgtggt eatetttttg taeaetteag 780
```

```
ccatgttttc ttacatgaat ccccgcagta cacatgggcc tgacaaagac aagtctttct 840
ccctcctcta taccatcatc atgcccatgt gcaacccggt catctacage ttccgcaaca 900
aggaaatgaa gggggccatg gggcgggctc ttgggagagg cagcctggct taggcaggat 960
                                                                  962
<210> 1289
<211> 958
<212> DNA
<213> Mus musculus
<220>
<223> MOR245-24P
<400> 1289
gaagcaaatg actctgtggt gaaagaattt atttttattg gcctctctga ttctcaggga 60
cttcagatct ttctatttgc attctttctc attttctatg taggaattgt gtttggtaac 120
cttcttattg tcatgacagt aacctatgac tcccacctcc actctcctat gtatttcctt 180
ctggccaacc tctcattcat tgatctgtgt ctgtcttctg tcacagcacc aaagatgatt 240
gctgattttt tcaggaaaca caaagtcatc tctgtccatg gctgttttgc acagatattt 300
ctccttcact tctttggggg gagtgagctg gtgaccctca tagccatggc ctttgacaga 360
tatgtagcaa tttgtaagcc tctacgctac acaataatta tgcgtggcaa tgtatgtgct 420
ggcattgtgg ctactgcatg ggcaactggc ttcctacact cagtgagcca attggccttt 480
gccgtcaact taccettttg tggtcccaat aaggttgaca gtttttattg tgacetteet 540
agagtaatca aacttgcctg tgcagacaca tataggttag acatcatggt cattgccaac 600
agtggtgtgc ttactgtgtg ctcttttgtt ttgttaatca tctcctacag tatcattcta 660
actaccatcc agegeegeec ttetgatagg teatetaagg etetgtetac aetgaetget 720
catatcacag tagttetttt gttttttgga eettgeattt teatttatge etggeeettt 780
cccatcaagt cattagataa attcccttgc tgtgttttat tctgtggtca ctcctcttt 840
gaaccccatt atatacacac tgaggaacac agagatgaaa actgccatga gacgccctga 900
gacaatggaa tttaaacttt tgggtgaact catagatctc ctctggccac gagattga
<210> 1290
<211> 932
<212> DNA
<213> Mus musculus
<220>
<223> MOR256-53P
<400> 1290
atgggagcaa ccaacgacag cacettcage catttcatee ttactggett etetgacegg 60
cetgagetgg agagggteet ettegeeate etectgeeeg eetaceteet gaeeetgetg 120
ggcaacagca ccatcatect ggtgtecagg etggaecege acetteacae ecceatgtae 180
ttetteetea cacacetgte etteetggae etcagettea ecagtagete cateceacag 240
ctactctata acctcagcgg gccagacaag accatcagct atgtgggctg tgctctgcag 300
etggteetgt teetgggeet ggggggtgtg gagtgeetge tgetggetgt catggeetat 360
gaccgatttg tggcgatctg caaacctctg cactacatgg tcatcatgag ccccaggctc 420
tgcgtgggcc tggtctcagt ggcctggagc tgcggtgtgg ccaactccct tggctatgtc 480
tecageaace eteageetae eccqetqeqq qeaceacaqq qtqqateact tectetqeqa 540
gatgccagct ctcatcagga tggcctgtgt caacactggc cgcagtggaa ggcactgtct 600
tegteetgge aataggeate gtgttgtege etetggtgtt catettggte teetaeggtt 660
acattgtaag ggctgtgtta caaatccgct ccgctgcagg gcggcagaag gcattcaaca 720
cgtgtggttc gcatctcacc gtggtctcgc ttttctatgg aaatatcatc tacatgtaca 780
tgcagccggg gaacagctcc tcccaggacc agggcaagtt cctcaccctc ttctacaaca 840
ttgtcacccc tctcctcaac cctctgatct acacgctcag gaacaaggag gtgaaggggg 900
cgctcagaag gctgctcctg ggtagccgag ag
                                                                  932
```

```
<210> 1291
<211> 951
<212> DNA
<213> Mus musculus
<220>
<223> MOR265-1
<400> 1291
atgtctaact ctgagctcat gaagaatgga agcctgtccc tctgcactga attcacattg 60
gtggcctttt cttctctagc agagctgcag cttgtcctct ttgttgtgtt cttggttctc 120
tacttqttta caqtqqqaqq aaacctcacc atcatctqtq tqatctqqac cacaccttct 180
ctacacacgc ccatgtactt cttcctggcc aacctctcct tcctagagat gtgctatatc 240
agcagtgtgg tgcctcagat gctggtgcac ctgctggtac agctcaagac cataagtgtg 300
gcaggetgtg cagetcagat gtatgtatte accatettgg ggetgacaga gtgttgcett 360
ctggcaacta tggcttatga tcgctttgtg gctatttgtt acccactaca ttacactctg 420
tggatggacc cttctgtctg tctgaagttg gctggtgcat cttggatgac tgggatcctg 480
gtagaatcag cccagaccac ctggatcttc actctgccct tttgtggagc aggaacaatt 540
caacactttt tctgtgacat catgcctgtg gtaaaattag cttgtgtgga tacttcccag 600
aatgaaatgg tgatatttat tatttctctt atcttcatta tgagtccctg tctcttcatt 660
ctatgctctt atgtccgcat tattctgacc atcttgaaaa tgccctcagc agcaggcaga 720
cacaaagett tetecaeetg etecteteat ateetggttg tttetetttt etatggeaet 780
gccttattca cttatctcca acccaaqagt tcacacaccc cagacacaga caaggttact 840
geteteatgt acactgtggt caccectget etgaateetg ttatetatae gttgaggaae 900
aaagaagtga aagaagcctt tcaaaaggta acacagaagg aaacttcata g
                                                                   951
<210> 1292
<211> 934
<212> DNA
<213> Mus musculus
<220>
<223> MOR150-3
<400> 1292
atgggaggta aaaaccagac agatgtttct cacttctttc ttctgggact aacagatgat 60
ccaactgtga agcctgtgat cttttgtatc ttcctgttga tgtacatggt caccatcttg 120
ggaaatctgc ttattatcct tgctgtatgt tcttattctc atttgcaaac acccatgtac 180
ttttttattt caaatttatc cattaatgat atctgcttat ccacaactgt cattccaaat 240
atgttacgga ctactcaaac acaggatcag agcatcagtt atgcaggctg ccttactcag 300
ctttgctttg tcttgctatt tgctggattc gaaagctgtc ttcttgcagc aatggcctat 360
gaccgatatg ttgctatttg ttatccactg agttatacag tcatgatgaa ttttcattca 420
tgtgctctac taattctctt ctctgttctc attagcgttt tgaacatggg acttcttggt 480
ctcatggtat taagactatc tttctgcaca aatctagaga tccccttatt cttctgtgaa 540
ctttctcagg tcatgaagct tgcatgctct gacaccctta ttaatgatat tctgatatat 600
cttgcaacat ttatatttgg tggcatccca atctctggta ttattttctc ttatgtccaa 660
attgcttctt ctgttttgag aatatcatca gtaaaaggaa gatgtaaagc cttttccact 720
tgtggttctc acttgtcagt gacttctttg tcctatggtt caggattgtg ggtttatata 780
acctetteag ttgetatttt acceaagaag actteagtgg cetgeattat gtacaetgta 840
gtcccacaaa tqgttgaacc catttatctt tagccttcga aataaggaca tgaaaggaac 900
tatgaaaaaa ttcatcagta aagtagcttc tctt
                                                                   934
<210> 1293
<211> 934
<212> DNA
<213> Mus musculus
```

```
<220>
<223> MOR256-54P
<400> 1293
atgageaget teaacaccae ettaaaaggt ggetteattt tgatgggett etcagaetgg 60
cctcaactgg aacatatctt ttttgtcttc atttcaatgt tctatatcct aaccatcttt 120
ggaaacttca ccatcatcac aatctcacga atggatcagc gactacaaac accaatgtac 180
ttcttcctta acaacctctc tttcctggac ctctgctaca acaccagcat tgtacctcag 240
cttcttgtca atatttctgg aattgacaag accatgagct atgctgggtg catgacccag 300
ttcttcatag tgctcttact gggtggaact gagtgtatgc tccttgtggt gatggctttc 360
gaccgctatg tcgctgtgtg tcatccacta cactacacca gcattatgca cccccttctc 420
tgccatgcat tggccatctc ctcctgggtg ggaggccttg tgaactctct gactcagaca 480
agcctcatca tgaccatacc tctctgtggc catcacctga accacttctt ctgtgagatg 540
cttgttctcc tgaagctggc ttgtgaggac acagtgggaa cagaggccaa cttgtttgtg 600
gctggagcga ttattttggt ctgtcctgta gcactaattc taggcaccta tgcacacatt 660
gctcatgcag tgttgaagat caagtcaaga tctgggcgca gaaaggctct ggggacttgg 720
tgggtcccac cttactgggg gtttttcttt tttatggctc agccatgtac atgtatctcc 780
aacctgtcca cgtgtattcc gggagtgaag gaaagtttgc tgccctcttt tatactatca 840
ttactccaat gatgaaccct gatttatacc ctaaaaaaca aaaatgtgaa ggggggcttt 900
gtgcaaggta ctagggagag atacaagcac aaca
<210> 1294
<211> 948
<212> DNA
<213> Mus musculus
<220>
<223> MOR267-17
<400> 1294
atggctgtca tgttggggct aaattacacc tttgtgtcag agttcatcct cattggcttc 60
totacettee eteatettea getgatgtte tteetgetgt teetgeteat gtacetette 120
acactgctag gcaacctgct catcatgacc accatctgga gtgaacacag tctccacaca 180
cccatgtace tetteetgtg tgccetetee atetetgaga ttttetacae etttgccate 240
atcocacgca tgttggctga cctgctcacc acacttcact ccatcgcctt tctggcctgt 300
gccagccaga tgttcttctc cttcacattt ggcttcaccc attcctttct actcaccgtc 360
atgggctatg accgctacgt ggccatctgt cacccactga gatacaatgt gctcatgagc 420
ccccgtggct gtgcctgcct ggtagcctgg tcctgggttg gtggatcatt catggggaca 480
gtggtgacga cagccatttt caacctcaca ttctgtggac ccaatgagat ccaccatttt 540
acttgtcatg ttccacctct attgaagttg gcatgtggag agaatgtact ggaggtggca 600
aagggtgtag aaatagtgtg catcacagcc ctcctgggct gctttctcct catcctcctc 660
teatatgeet teattgtggt taccatettg aagataceat eagetgaggg teggeacaag 720
gettteteea catgtgeate ceaceteaca gtggtggttg tacattatgg etttgettet 780
gtcatttacc tcaagcctaa gggccccaag tctctggaag gagatactct gatgggcatc 840
acctacacag tecteacece etteettagt eccateatet teagteteag gaacaaggag 900
ctaaagaatg ccatggaaga aagctttcct caacaaatta tttccaca
<210> 1295
<211> 970
<212> DNA
<213> Mus musculus
<220>
<223> MOR15-3
<400> 1295
atgetteatg teaacateac caacaceate ttetecacet teetggttac aggeatteea 60
```

```
gggctggagg cagtgtacat ctggatagcc ataccattct gtgccatgtt tctcatcact 120
atggtgggca acatgaccat cataattgtt atctggcatg agcagactct tcatgttcct 180
atgtatetat teetggeeat gttageetee tetgatetgg gtetetetet gtttaeette 240
cccacactgt tgagaatctt cctgctgaat gatagagagt tgaccaccac tgcttgtttc 300
acgcagatgt tcttcattca cactttccaa gaccttgaat cagctattat tctggcaatg 360
gccttcgatc ggtatgtggc catttctcac ccacttcact atcactccat tctcacagac 420
actgtgattg ccaagatagg cttggctatt gttgtacgaa ccttaactgt gcaggtgcct 480
ctccctatcc tcttgaagag attgtacttc tgtcattcca atgtactatc tcattcctac 540
tgtttgcatc ctgacatcat aaagctctcc tgctccagta ctactgtcaa cagtatcttt 600
ggactttttg tagtgctctc caccatgggg cttgacttcc tccttatcct actctcatat 660
gcattgattc tgaaaacagt actgaatatg gcttcccaca gtggccgcct caaggctctc 720
aacacctqca tototcatct qtqtqctqtq qtcctcttct tcacacccat qatctqccta 780
tocatgotgc atogttttgg tocaaggott coctoacatg totatgtgac cotggecaac 840
atgcactttc taattcctcc agtgatgaac cccatcgtct atgtggtgaa aaccaaggca 900
gatccgtgac aaaattcaga aactcttcat tagaaaagca acaaagaaag ctcaggctgc 960
atctataaca
<210> 1296
<211> 902
<212> DNA
<213> Mus musculus
<220>
<223> MOR184-11P
<400> 1296
atggagaaga caaatcactc tttgaccaca cagttcatcc tggtgggatt ctcagatcac 60
ccagacttga agacacctct gttcctgctg ttctctgtca tctatctggt caccatggtg 120
gggaatettg ggetggtgge egtgatetae ttggageete gtetecaeae acceatgtae 180
atctttctgg gcaacctggc tctgatggac tcctgctgct cctgtgccat cactcccaag 240
attctagaga acttcttttc tgtagacaga aggatttctc tctatgaatg catggcacaa 300
ttctattttc tgtgtcttgc tgaaactgca gactgctttc ttctggcagc aatggcctat 360
gaccgctatg tggccatatg caaccctctg cagtaccaca qcatgatgtc caagaaactc 420
tccattcaga tgagtatagg cacattcata accagtaacc tgcattcctt gattcatgta 480
gggtgtctct taaggttaac tttctgtaaa tctaacagaa tttgatcatt tcttctgtga 540
tattetteee etatatagae teteetgtae agaeceattt ateaatgaat taatgatata 600
tattttttct atgccaattc aagtcttcac cattaccact gtcttggtct cttacttctg 660
cattettete actatttea agatgaaate caaaggatgg gagaggaaaa geatttteta 720
cctgtgcatc ccactttttt tctgtgtcaa tattctatgc ctgtcttctc atgtatatta 780
gaccatttga tgacagtaat aaagacatac cagtggccat attttataca ataataattc 840
ctttgttaaa cccttttatt tacagcctga gaaatactga ggtagtaaat gcgttaagaa 900
                                                                  902
<210> 1297
<211> 307
<212> PRT
<213> Mus musculus
<400> 1297
Met Trp Ser Asn Ile Ser Ala Ala Pro Phe Leu Leu Thr Gly Phe Pro
                                    10
                 5
Gly Leu Glu Ala Ala His His Trp Ile Ser Ile Pro Phe Phe Ala Ile
                                25
Tyr Ile Ser Val Leu Leu Gly Asn Gly Thr Leu Leu Tyr Leu Ile Lys
                            40
Asp Asp His Asn Leu His Glu Pro Met Tyr Tyr Phe Leu Ala Met Leu
                        55
```

```
Ala Gly Thr Asp Leu Thr Val Thr Leu Thr Thr Met Pro Thr Val Met
                    70
                                        75
Ala Val Leu Trp Val Asn His Arg Glu Ile Arg His Gly Ala Cys Phe
                                    90
Leu Gln Ala Tyr Ile Ile His Ser Leu Ser Ile Val Glu Ser Gly Val
            100
                                105
Leu Leu Ala Met Ser Tyr Asp Arg Phe Val Ala Ile Cys Thr Pro Leu
                            120
                                                125
His Tyr Asn Ser Ile Leu Thr Asn Ser Arg Val Ile Ala Ile Gly Leu
                       135
Gly Val Val Leu Arg Gly Phe Leu Ser Leu Val Pro Pro Ile Leu Pro
                   150
                                        155
Leu Phe Trp Phe Ser Tyr Cys Arg Ser His Val Leu Ser His Ala Phe
                165
                                    170
Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Ala Asp Ile Thr Phe
           180
                               185
Asn Arg Ile Tyr Pro Val Val Leu Val Ala Leu Thr Phe Phe Leu Asp
                            200
Ala Leu Ile Ile Val Phe Ser Tyr Val Leu Ile Leu Lys Thr Val Met
                        215
Gly Ile Ala Ser Gly Glu Glu Arg Ala Lys Ala Leu Asn Thr Cys Val
                    230
                                        235
Ser His Ile Ser Cys Val Leu Val Phe Tyr Ile Thr Val Ile Gly Leu
               245
                                    250
Thr Phe Ile His Arg Phe Gly Lys Asn Ala Pro His Val Val His Ile
                                265
Thr Met Ser Tyr Val Tyr Phe Leu Phe Pro Pro Phe Met Asn Pro Ile
                           280
                                               285
Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln Arg Ser Val Leu His Leu
   290
                        295
                                            300
Leu Ser Val
305
```

<211> 315

<212> PRT

<213> Mus musculus

<400> 1298

Met Pro Ser Met Trp Leu Asn Ile Ser Ser Ser Pro Phe Leu Leu Thr 10 Gly Phe Pro Gly Leu Glu Lys Ala His His Leu Ile Ser Leu Pro Leu 25 Leu Met Ala Tyr Ile Ser Ile Leu Leu Gly Asn Gly Thr Leu Leu Phe 40 Leu Ile Lys Asp Asp His Asn Leu His Glu Pro Met Tyr Tyr Phe Leu 55 Gly Met Leu Ala Ala Thr Asp Leu Gly Val Thr Leu Thr Thr Met Pro Thr Val Leu Ser Val Leu Trp Leu Asn His Arg Glu Ile Gly His Gly 90 85 Ala Cys Phe Ser Gln Ala Tyr Phe Ile His Thr Leu Ser Ile Val Glu 105 Ser Gly Val Leu Leu Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Arg 120 Asn Pro Leu Arg Tyr Thr Thr Ile Leu Thr Asp Thr Lys Val Ile Lys

```
130
                      135
Ile Gly Ile Gly Leu Val Met Arg Ala Gly Leu Ser Ile Met Pro Ile
                                      155
                   150
Ile Ile Arg Leu His Trp Phe Pro Tyr Cys Arg Ser His Val Leu Ser
               165
                                   170
His Ala Phe Cys Leu His Gln Asp Val Ile Lys Leu Ala Cys Ala Asp
                               185
                                                   190
Ile Thr Phe Asn Arg Leu Tyr Pro Val Val Val Phe Ala Met Val
                           200
                                              205
Leu Leu Asp Phe Leu Ile Ile Phe Phe Ser Tyr Val Leu Ile Leu Lys
                       215
                                           220
Thr Val Met Gly Ile Ala Ser Thr Asp Glu Arg Ala Lys Ala Leu Asn
                  230
                                       235
Thr Cys Val Ser His Ile Cys Cys Ile Leu Val Phe Tyr Val Thr Val
               245
                                   250
Val Gly Leu Thr Phe Ile His Arg Phe Gly Lys Asn Val Pro His Val
                               265
Val His Ile Thr Met Ser Tyr Ile Tyr Phe Leu Phe Pro Pro Phe Met
                           280
Asn Pro Val Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln Ser Gly Leu
                       295
Leu Arg Leu Phe Ser Leu Pro Cys Ser Lys Thr
                   310
```

<211> 311

<212> PRT <213> Mus musculus

<400> 1299

Met Trp Pro Asn Ser Ser Asp Ala Pro Phe Leu Leu Thr Gly Phe Leu 1.0 Gly Leu Glu Met Ile His His Trp Ile Ser Ile Pro Phe Phe Val Ile Tyr Phe Ser Ile Ile Val Gly Asn Gly Thr Leu Leu Phe Ile Ile Trp 40 Ser Asp His Ser Leu His Glu Pro Met Tyr Tyr Phe Leu Ala Val Leu 55 Ala Ser Met Asp Leu Gly Met Thr Leu Thr Thr Met Pro Thr Val Leu 75 7.0 Gly Val Leu Val Leu Asn Gln Arg Glu Ile Val His Gly Ala Cys Phe 85 Ile Gln Ser Tyr Phe Ile His Ser Leu Ala Ile Val Glu Ser Gly Val 105 100 Leu Leu Ala Met Ser Tyr Asp Arg Phe Val Ala Ile Cys Thr Pro Leu 120 His Tyr Asn Ser Ile Leu Thr Asn Ser Arg Val Met Lys Met Ala Leu 130 135 Gly Ala Leu Leu Arg Gly Phe Val Ser Ile Val Pro Pro Ile Met Pro 150 155 Leu Phe Trp Phe Pro Tyr Cys His Ser His Val Leu Ser His Ala Phe 170 Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Ala Asp Ile Thr Phe 180 185 190 Asn Leu Ile Tyr Pro Val Val Leu Val Ala Leu Thr Phe Phe Leu Asp 200

```
Ala Leu Ile Ile Ile Phe Ser Tyr Val Leu Ile Leu Lys Lys Val Met
                        215
                                            220
Gly Ile Ala Ser Gly Glu Glu Arg Lys Lys Ser Leu Asn Thr Cys Val
                    230
                                        235
Ser His Ile Ser Cys Val Leu Val Phe Tyr Ile Thr Val Ile Gly Leu
                                    250
Thr Phe Ile His Arg Phe Gly Lys Asn Ala Pro His Val Val His Ile
                                265
Thr Met Ser Tyr Val Tyr Phe Leu Phe Pro Pro Phe Met Asn Pro Ile
                           280
                                                285
Ile Tyr Ser Ile Lys Thr Lys Gln Ile Gln Arg Ser Ile Leu Arg Leu
                       295
Leu Ser Lys His Ser Arg Thr
```

<210> 1300 <211> 317

<212> PRT

<213> Mus musculus

<400> 1300

Met Pro Val Ile Trp Leu Asn Thr Ser Thr Tyr Pro Phe Leu Leu Thr 10 Gly Phe Pro Gly Leu Glu Lys Ser His His Leu Ile Ser Leu Pro Leu 2.0 25 Leu Met Ala Tyr Ile Phe Ile Leu Leu Gly Asn Gly Thr Leu Leu Phe 40 Leu Ile Lys Asp Asp His Asn Leu His Glu Pro Met Tyr Tyr Phe Leu 55 Gly Met Leu Ala Ala Thr Asp Leu Gly Val Thr Leu Thr Thr Met Pro 75 Thr Val Leu Gly Val Leu Trp Leu Asn His Arg Glu Ile Gly His Gly 90 Ala Cys Phe Ser Gln Ala Tyr Phe Ile His Ser Phe Ser Ile Val Glu 100 105 110 Ser Gly Val Leu Leu Ala Met Ala Tyr Asp Arg Phe Ile Ala Ile Arg 120 Asn Pro Leu Arg Tyr Thr Thr Ile Leu Thr Asp Ile Lys Val Ile Lys 135 140 Ile Gly Ile Gly Val Val Met Arg Ala Gly Leu Ser Ile Met Pro Ile 150 155 Ile Ile Arg Leu His Trp Phe Pro Tyr Cys Arg Ser His Val Leu Ser 165 170 His Ala Phe Cys Leu His Gln Asp Val Ile Lys Leu Ala Cys Ala Asp 185 Ile Thr Phe Asn Arg Leu Tyr Pro Ile Val Val Phe Cys Met Gly 200 Leu Leu Asp Phe Leu Ile Ile Cys Phe Ser Tyr Ile Leu Ile Leu Lys 215 220 Thr Val Met Gly Ile Ala Ser Thr Asp Glu Arg Ala Lys Ala Leu Asn 230 235 Thr Cys Val Ser His Ile Cys Cys Ile Leu Val Phe Tyr Val Thr Val 245 250 Val Gly Leu Thr Phe Ile His Arg Phe Gly Lys Asn Ile Pro His Ile 265 Val His Ile Thr Met Ser Tyr Ile Cys Phe Leu Phe Pro Pro Phe Met

275 280 Asn Pro Val Ile Phe Ser Ile Lys Thr Lys Gln Ile Gln Ser Gly Leu 295 300 Leu Arg Leu Phe Ser Leu Pro Tyr Ser Arg Ile Arg Leu 310 <210> 1301 <211> 314 <212> PRT <213> Mus musculus <400> 1301 Met Gly Gly Glu Ala His Asn Ser Ser Gly Leu Pro Pro Phe Ile Leu 10 Thr Gly Leu Pro Gly Met Glu Thr Ser Gln His Trp Leu Phe Leu Leu 25 Leu Gly Val Leu Tyr Ser Val Ser Ile Val Gly Asn Ala Leu Ile Leu Phe Ile Ile Lys Glu Glu Glu Ser Leu His Gln Pro Met Tyr Tyr Phe Leu Ser Leu Leu Ser Gly Asn Asp Leu Gly Val Ser Phe Ser Thr Leu 75 70 Pro Thr Val Leu Gly Val Phe Cys Phe His Leu Arg Glu Ile Ser Phe 90 Asn Ser Cys Met Ser Gln Met Phe Phe Ile His Leu Phe Ser Phe Met 100 105 Glu Ser Gly Ile Leu Leu Ala Met Ser Phe Asp Arg Tyr Val Ala Ile 120 115 125 Cys Asn Pro Leu Arg Tyr Ser Thr Val Leu Thr Asp Ala Arg Val Met 135 140 Trp Met Gly Val Cys Val Phe Leu Arg Ser Phe Cys Met Ile Phe Pro 150 155 Leu Pro Phe Leu Leu Lys Arg Leu Pro Phe Cys Lys Ala Asn Val Leu 170 Ser His Ala Tyr Cys Leu His Pro Asp Leu Ile Arg Leu Pro Cys Gly 185 180 190 _Asp Thr Ser Ile Asn Asn Ile Phe Gly Leu Ser Ile Val Ile Ser Thr 200 Phe Gly Leu Asp Ser Ala Leu Ile Phe Leu Ser Tyr Val Leu Ile Leu 215 220 Arg Ser Val Leu Ala Ile Ala Ser Arg Glu Glu Arg Met Lys Thr Leu 230 235 Asn Thr Cys Val Ser His Leu Cys Ala Val Leu Ile Phe Tyr Val Pro 250 245 Lys Val Gly Val Ser Met Phe Ala Arg Tyr Gly Arg His Ala Pro His 265 Tyr Val His Thr Leu Leu Ser Leu Ile Tyr Leu Phe Val Pro Pro Met 280 Leu Asn Pro Val Ile Tyr Ser Ile Lys Thr Lys Glu Ile Arg Arg Arg 295 Phe Cys Lys Ile Leu Leu Gly Asn Lys Phe

310

<213> Mus musculus

<400> 1302 Met Leu Arg Pro Ser Ser Met Ser Glu Val Thr Asn Thr Thr His Gly Pro Phe Tyr Phe Ile Leu Thr Gly Ile Pro Gly Phe Glu Asp Ile His 25 Leu Trp Ile Ser Ile Pro Phe Phe Cys Leu Tyr Thr Ile Ser Ile Met 40 Gly Asn Thr Thr Ile Leu Thr Val Ile Arg Thr Glu Pro Ser Leu His 55 Glu Pro Met Tyr Leu Phe Leu Ser Met Leu Ala Leu Thr Asp Leu Gly 70 75 Leu Thr Leu Thr Thr Leu Pro Thr Val Met Gln Val Leu Trp Phe Asn 85 90 Ile Arg Glu Ile Ser Phe Glu Ala Cys Phe Ala Gln Val Phe Phe Leu 105 100 His Gly Phe Ser Phe Met Glu Ser Ser Val Leu Leu Ala Met Ser Phe 120 Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu His Tyr Ala Ser Ile Leu 135 140 Thr Ser Glu Val Ile Ala Arg Ile Gly Leu Ala Ile Ile Cys Arg Cys 155 Val Leu Ala Val Leu Pro Ser Leu Phe Leu Leu Lys Arg Leu Pro Phe 165 170 Cys His Ser His Leu Leu Ser His Ser Tyr Cys Leu His Gln Asp Met 185 190 Ile His Leu Val Cys Ala Asp Ile Arg Val Asn Arg Trp Tyr Gly Phe 200 205 Ala Leu Val Leu Ile Ile Val Leu Asp Pro Leu Leu Ile Val Leu 215 Ser Tyr Ala Leu Ile Leu Lys Ser Val Leu Asn Thr Ala Thr Trp Thr 230 235 Glu Arg Leu Arg Ala Leu Asn Asn Cys Leu Ser His Met Leu Ala Val 245 250 Leu Val Leu Tyr Val Pro Met Val Gly Val Ser Met Thr His Arg Phe 260 265 Ala Lys His Ala Ser Pro Leu Val His Val Leu Met Ala Asn Ile Tyr 280 285 Leu Leu Ala Pro Pro Val Met Asn Pro Ile Ile Tyr Ser Val Lys Thr 295 Lys Gln Ile Arg Gln Gly Ile Thr Arg Leu Leu Gln Arg Lys Val

```
<210> 1303
```

305

His

<400> 1303

Met Lys Val Ser Ile Pro Pro Arg Ala Asn Phe Ser Tyr Ala Ile Phe 1 5 10 15 Leu Leu Thr Gly Phe Pro Gly Leu Glu Trp Ala His His Trp Ile Ser

315

310

<211> 317

<212> PRT

<213> Mus musculus

```
25
            20
Leu Pro Ile Phe Met Gly Tyr Phe Val Ala Ile Met Gly Asn Ala Thr
Ile Leu His Leu Val Arg Thr Asp Pro Ser Leu His Gln Pro Met Tyr
Tyr Phe Leu Ala Ile Leu Ala Val Thr Asp Leu Gly Leu Cys Met Ser
                   70
                                        75
Thr Leu Pro Ser Val Leu Gly Val Leu Trp Phe Asp Ala Arg Met Val
                                    90
Gly Leu Val Pro Cys Val Leu Gln Gln His Phe Leu His Ser Phe Ser
                                105
           100
Phe Met Glu Ser Ala Val Leu Phe Ala Met Ala Leu Asp Arg Leu Ile
                           120
                                                125
       115
Ala Ile Arg Phe Pro Leu Arg Tyr Ala Ser Val Leu Thr Gly Pro Arg
                       135
                                           140
Val Ala Leu Ile Gly Thr Val Leu Gly Met Arg Ser Ala Ala Ile Thr
                    150
                                        155
Ala Ala Pro Ser Leu His Leu Leu Thr Phe Asp Tyr Cys His Pro Gly
                                    170
Ala Leu Ser His Ala Tyr Cys Leu His Gln Asp Met Ile Arg Leu Ala
                                185
Cys Ser Asp Thr Arg Phe Asn Arg Leu Tyr Gly Leu Cys Ile Ile Met
                            200
                                                205
Leu Ala Met Gly Ser Asp Val Leu Phe Ile Leu Leu Ser Tyr Ala Val
                       215
                                            220
Ile Leu Arg Thr Val Leu Ala Ile Ala Ser Ala Gly Glu Arg Leu Lys
                   230
                                        235
Ala Leu Asn Thr Cys Val Ser His Ile Leu Ala Val Leu Cys Phe Tyr
                                    250
               245
Val Pro Val Leu Gly Leu Ser Ile Val His Arg Phe Gly Gln His Thr
                                265
Ser Pro Leu Val His Ile Leu Met Gly Thr Val Ser Val Leu Phe Pro
                            280
Pro Val Met Asn Pro Val Ile Tyr Ser Ile Lys Thr Gln Gln Ile Arg
                       295
Arg Ala Ile Val Lys Val Ile Ser Leu Gly Lys Ile Gln
                    310
<210> 1304
<211> 321
<212> PRT
<213> Mus musculus
```

<400> 1304

Met Leu His Pro Ser Ser Met Ser Glu Val Thr Asn Thr Thr His Asp 1 Pro Phe Tyr Phe Ile Leu Thr Gly Ile Pro Gly Phe Glu Asp Ile His Leu Trp Ile Ser Ile Pro Leu Phe Cys Leu Tyr Thr Ile Ser Ile Met 40 Gly Asn Thr Thr Ile Leu Thr Val Ile Arg Thr Glu Pro Ser Leu His 55 Gln Pro Met Tyr Leu Phe Leu Ser Met Leu Ala Leu Thr Asp Leu Gly 75 70 Leu Thr Leu Thr Thr Leu Pro Thr Val Met Gln Leu Leu Trp Phe Asn 90 85

```
Ile Arg Glu Ile Ser Phe Glu Ala Cys Phe Ala Gln Phe Phe Leu
                               105
           100
His Gly Phe Ser Phe Met Glu Ser Ser Val Leu Leu Ala Met Ser Phe
                           120
Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu His Tyr Ala Ser Ile Leu
                       135
Thr Ser Glu Val Ile Ala Arg Ile Gly Leu Ala Ile Ile Cys Arg Cys
                   150
                                       155
Val Leu Ala Val Leu Pro Ser Leu Phe Leu Leu Lys Arg Leu Pro Phe
                                   170
Cys His Ser His Leu Ile Ser His Ser Tyr Cys Leu His Gln Asp Met
           180
                               185
Ile His Leu Val Cys Ala Asp Ile Arg Val Asn Ser Trp Tyr Gly Phe
                           200
Ala Leu Val Leu Leu Ile Ile Val Leu Asp Pro Leu Leu Ile Val Leu
                       215
                                           220
Ser Tyr Ala Leu Ile Leu Lys Ser Val Leu Asn Thr Ala Thr Trp Thr
                   230
                                       235
Glu Arg Leu Arg Ala Leu Asn Asn Cys Leu Ser His Met Leu Ala Val
               245
                                   250
Leu Val Leu Tyr Val Pro Met Val Gly Val Ser Met Thr His Arg Phe
           260
                               265
Ala Lys His Ala Ser Pro Leu Val His Val Leu Met Ala Asn Ile Tyr
                           280
Leu Leu Ala Pro Pro Val Met Asn Pro Ile Ile Tyr Ser Val Lys Thr
                       295
                                          300
Lys Gln Ile Arg Gln Gly Ile Thr Arg Leu Leu Gln Arg Lys Val
305
His
```

```
<210> 1305
<211> 326
<212> PRT
<213> Mus musculus
```

<400> 1305

Met Lys Val Ala Ser Ser Phe His Asn Asp Thr Asn Pro Gln Asp Val 10 Trp Tyr Val Leu Ile Gly Ile Pro Gly Leu Glu Asp Leu His Ser Trp 25 Ile Ala Ile Pro Ile Cys Ser Met Tyr Ile Val Ala Val Ile Gly Asn 40 4.5 Val Leu Leu Ile Phe Leu Ile Val Thr Glu Arg Ser Leu His Glu Pro 55 Met Tyr Phe Phe Leu Ser Met Leu Ala Leu Ala Asp Leu Leu Ser 70 75 Thr Ala Thr Ala Pro Lys Met Leu Ala Ile Phe Trp Phe His Ser Arg 90 Gly Ile Ser Phe Gly Ser Cys Val Ser Gln Met Phe Phe Ile His Phe 105 Ile Phe Val Ala Glu Ser Ala Ile Leu Leu Ala Met Ala Phe Asp Arg 120 125 Tyr Val Ala Ile Cys Tyr Pro Leu Arg Tyr Thr Thr Ile Leu Thr Ser 135 Ser Val Ile Gly Lys Ile Gly Thr Ala Ala Val Val Arg Ser Phe Leu

```
145
                   150
                                       155
Ile Cys Phe Pro Phe Ile Phe Leu Val Tyr Arg Leu Leu Tyr Cys Gly
                                   170
               165
Lys His Ile Ile Pro His Ser Tyr Cys Glu His Met Gly Ile Ala Arg
           180
                               185
Leu Ala Cys Asp Asn Ile Thr Val Asn Ile Ile Tyr Gly Leu Thr Met
                           200
       195
                                               205
Ala Leu Leu Ser Thr Gly Leu Asp Ile Leu Leu Ile Ile Ser Tyr
                       215
                                           220
Thr Met Ile Leu Arg Thr Val Phe Gln Ile Pro Ser Trp Ala Ala Arg
                   230
                                        235
Tyr Lys Ala Leu Asn Thr Cys Gly Ser His Ile Cys Val Ile Leu Leu
               245
                                   250
Phe Tyr Thr Pro Ala Phe Phe Ser Phe Phe Ala His Arg Phe Gly Gly
           260
                               265
Lys Thr Val Pro Arg His Ile His Ile Leu Val Ala Asn Leu Tyr Val
                           280
Val Val Pro Pro Met Leu Asn Pro Ile Ile Tyr Gly Val Lys Thr Lys
                       295
                                            300
Gln Ile Gln Asp Arg Val Val Phe Leu Phe Ser Ser Val Ser Thr Cys
                   310
                                        315
Gln His Asp Ser Arg Cys
```

<211> 315

<212> PRT

<213> Mus musculus

<400> 1306

Met Leu Gly Thr Asn Phe Thr Ile Ile His Pro Thr Val Phe Ile Leu Leu Gly Ile Pro Gly Leu Glu Gln Tyr His Thr Trp Leu Ser Ile Pro Phe Cys Leu Met Tyr Ile Ala Ala Val Leu Gly Asn Gly Ala Leu Ile 40 Leu Val Val Leu Ser Glu Arg Thr Leu His Glu Pro Met Tyr Val Phe 55 Leu Ser Met Leu Ala Gly Thr Asp Ile Leu Leu Ser Thr Thr Thr Val 70 75 Pro Lys Thr Leu Ala Ile Phe Trp Phe His Ala Gly Glu Ile Pro Phe 90 8.5 Asp Ala Cys Ile Ala Gln Met Phe Phe Ile His Val Ala Phe Val Ala 100 105 Glu Ser Gly Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile 120 125 Cys Thr Pro Leu Arg Tyr Ser Ala Val Leu Thr Pro Met Ala Ile Gly 135 Lys Met Thr Leu Ala Ile Trp Gly Arg Ser Ile Gly Thr Ile Phe Pro 150 155 Ile Ile Phe Leu Leu Lys Arg Leu Ser Tyr Cys Arg Thr Asn Val Ile 165 170 Pro His Ser Tyr Cys Glu His Ile Gly Val Ala Arg Leu Ala Cys Ala 180 185 Asp Ile Thr Val Asn Ile Trp Tyr Gly Phe Ser Val Pro Met Ala Ser 195 200 205

```
Val Leu Val Asp Val Ala Leu Ile Gly Ile Ser Tyr Thr Leu Ile Leu
                        215
                                            220
Gln Ala Val Phe Arg Leu Pro Ser Gln Asp Ala Arg His Lys Ala Leu
                    230
                                        235
Asn Thr Cys Gly Ser His Ile Gly Val Ile Leu Leu Phe Phe Ile Pro
                                . 250
Ser Phe Phe Thr Phe Leu Thr His Arg Phe Gly Lys Asn Ile Pro His
                                265
His Val His Ile Leu Leu Ala Asn Leu Tyr Val Leu Val Pro Pro Met
                           280
Leu Asn Pro Ile Ile Tyr Gly Ala Lys Thr Lys Gln Ile Arg Asp Ser
                       295
Met Thr Arg Met Leu Ser Val Val Trp Lys Ser
                    310
```

<210> 1307 <211> 313

<212> PRT

<213> Mus musculus

<400> 1307

Met Ala Ile Leu Tyr Asn Ser Ser Leu Gln Lys Ala Thr Phe Phe Leu 10 Thr Gly Phe Gln Gly Leu Glu Glu Phe His Gly Trp Ile Ser Ile Pro 25 Phe Cys Ser Ile Tyr Leu Ile Val Ile Leu Gly Asn Leu Thr Ile Leu 40 His Val Ile Arg Thr Asp Ala Thr Leu His Glu Pro Met Tyr Tyr Phe 55 Leu Ala Met Leu Ala Leu Thr Asp Leu Gly Leu Cys Leu Ser Thr Leu 75 Pro Thr Val Leu Gly Ile Phe Trp Phe Asp Ala Arg Glu Ile Gly Ile 90 Pro Ala Cys Phe Thr Gln Leu Phe Phe Ile His Thr Leu Ser Leu Val 100 105 110 Glu Ser Ser Val Leu Leu Ser Met Ser Phe Asp Arg Tyr Val Ala Ile 120 125 . Cys Asn Pro Leu Arg Tyr Ser Thr Ile Leu Thr Pro Arg Arg Ile Val 135 140 Lys Met Gly Leu Ser Ser Val Leu Arg Ser Ala Leu Leu Ile Leu Pro 150 155 Leu Pro Phe Leu Leu Lys Arg Phe His Tyr Cys Arg Ser His Val Leu 165 170 Ala His Ala Tyr Cys Leu His Leu Glu Ile Met Lys Leu Ala Cys Ser 185 Ser Ile Ile Val Asn His Ile Tyr Gly Leu Phe Val Val Ala Cys Thr 200 205 Val Gly Val Asp Ser Leu Leu Ile Phe Leu Ser Tyr Thr Leu Ile Leu 215 220 His Ala Val Leu Gly Lys Ala Ser Arg Gln Glu Arg Leu Arg Ala Leu 230 235 Asn Thr Cys Ile Ser His Ile Cys Ala Val Leu Leu Phe Tyr Ile Pro 250 245 Met Ile Gly Leu Ser Leu Val His Arg Phe Gly Glu His Leu Pro Arg 265 Ile Val His Leu Leu Met Ser Tyr Val Tyr Leu Leu Val Pro Pro Leu

275 280 Met Asn Pro Ile Val Tyr Ser Ile Lys Thr Lys Gln Ile Arg Gln Arg 295 300 Ile Ile Lys Lys Phe Glu Phe Ile Lys 310 <210> 1308 <211> 318 <212> PRT <213> Mus musculus <400> 1308 Met Leu Val Lys Ser Ser Ile Met Ser Val Leu Asn Ser Ser Glu Ile 10 Glu Ile Thr Thr Phe Phe Leu Ile Gly Ile Pro Gly Leu Glu Tyr Ala His Ala Trp Ile Ser Ile Pro Ile Cys Leu Met Tyr Leu Val Ala Ile Leu Gly Asn Cys Thr Ile Leu Phe Val Ile Arg Thr Glu Pro Ser Leu 55 His Ala Pro Met Tyr Tyr Phe Leu Ser Met Leu Ala Ile Ser Asp Leu 70 75 Gly Leu Ser Leu Ser Ser Leu Pro Thr Met Leu Arg Ile Phe Val Phe 90 8.5 Asn Ala Thr Gly Ile Ser Pro Asn Ala Cys Phe Ala Gln Glu Phe Phe 100 105 Ile His Gly Phe Thr Asp Met Glu Ser Ser Val Leu Leu Ile Met Ser 115 120 125 Phe Asp Arg Phe Leu Ala Ile Arg Asn Pro Leu Arg Tyr Ser Ser Ile 135 140 Leu Thr Ser Ala Arg Val Ala Lys Met Gly Leu Val Phe Leu Ile Lys 150 155 Ser Met Leu Leu Val Leu Pro Phe Pro Phe Thr Leu Lys Arg Leu Ala 165 170 Tyr Cys Gln Lys Ser Leu Leu Ser His Ser Tyr Cys Leu His Gln Asp 180 185 Val Met Lys Leu Ala Cys Ser Asp Asn Thr Val Asn Phe Phe Tyr Gly 200 205 Phe Phe Val Ala Leu Cys Met Met Ser Asp Ser Met Phe Ile Ala Val 215 220 Ser Tyr Ile Phe Ile Leu Lys Thr Val Met Gly Ile Gly Ser His Lys 230 235 Glu Arg Leu Lys Ala Leu Asn Thr Cys Val Ser His Ile Cys Ala Val 245 250 Leu Ile Phe Tyr Val Pro Ile Ile Ala Leu Ala Ser Met His Arg Phe 260 265 Gly Lys His Lys Ser Pro Met Ala Met Ile Leu Ile Ala Asp Ile Phe 280 Leu Leu Val Pro Pro Leu Met Asn Pro Ile Val Tyr Cys Val Lys Thr 295 300 Arg Gln Ile Arg Glu Lys Val Leu Gly Lys Leu Gly Leu Lys 310

<400> 1309 Met Pro Thr Phe Gln Asn Thr Thr Ala Ser Ser Ile Ile Phe Leu Leu Thr Gly Val Pro Gly Leu Glu Ala Phe His Thr Trp Ile Ser Ile Pro 25 Phe Cys Phe Leu Tyr Ala Thr Ala Leu Ser Gly Asn Ser Leu Ile Leu Phe Val Ile Ile Thr Gln Pro Ser Leu His Glu Pro Met Tyr Tyr Phe 55. Leu Ser Met Leu Ser Thr Thr Asp Leu Gly Leu Ser Ile Ser Thr Leu 70 75 Ala Thr Met Leu Gly Ile Phe Trp Phe Asn Ala Arg Glu Ile Ser Phe 85 90 Asn Ala Cys Leu Ser Leu Met Phe Phe Ile Lys Leu Phe Thr Val Met 100 105 Glu Ser Ser Val Leu Leu Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile 120 Ser Asn Pro Leu Arg Tyr Ala Thr Ile Leu Thr Asp Ser Arg Ile Ala 135 140 Gln Ile Gly Val Thr Ile Val Ile Arg Gly Thr Val Met Leu Thr Pro 150 155 Met Val Ala Leu Leu Lys Arg Leu Thr Phe Cys Ser Ser Arg Val Leu 170 165 His His Ser Tyr Cys Phe His Pro Asp Val Met Lys Leu Ser Cys Thr 185 180 Asp Thr Arg Ile Asn Asn Ala Val Gly Leu Thr Ala Met Ile Ser Thr 195 200 205 Val Gly Val Asp Ser Val Leu Ile Leu Leu Ser Tyr Ile Leu Ile Ile 215 Arg Thr Val Leu Ser Ile Ala Ser Pro Glu Glu Arg Lys Lys Ala Phe 230 235 Ser Thr Cys Ile Ser His Ile Gly Ala Val Ala Ile Phe Tyr Ile Pro 245 250 Leu Ile Ser Leu Ser Phe Val His Arg Phe Gly Lys Arg Ala Pro Pro 260 265 Tyr Val His Thr Met Ile Ala Asn Thr Tyr Leu Leu Ile Pro Pro Val 280 285 Met Asn Pro Ile Ile Tyr Ser Val Lys Thr Lys Gln Ile Arg Lys Ala 295 Val Ile Lys Val Phe Gln Ser Lys Glu Ile 305 310

<210> 1310 <211> 318

<212> PRT

<213> Mus musculus

<400> 1310

Met Ile Pro Ser Gly Pro Phe Ile Asn Ile Ser Phe Phe Gln Pro Gln 1 5 10 15

Ser Phe Leu Met Ile Gly Ile Pro Gly Leu Glu Phe Ala His Gly Trp 20 25 30

Ile Ser Ile Pro Phe Ser Phe Met Tyr Thr Val Ala Leu Thr Gly Asn

```
35
                            40
Cys Leu Ile Leu Leu Ala Val Arg Arg Thr His Ser Leu His Gln Pro
                        55
Met Tyr Tyr Phe Leu Ser Met Leu Ala Leu Ser Asp Val Gly Leu Ser
                                        7.5
Leu Ser Thr Leu Pro Ser Thr Leu Ala Val Leu Trp Phe Asp Tyr Arg
                85
                                    90
Ser Ile Asp Phe Asn Ala Cys Leu Val Gln Met Phe Phe Leu His Ser
                               105
Phe Ser Val Val Glu Ser Ser Val Leu Leu Ala Met Ser Phe Asp Arg
                            120
                                                125
Phe Val Ala Ile Ser Asn Pro Leu Arg Tyr Ala Ser Val Leu Thr Asn
                        135
                                            140
Asn Val Ile Ile Arg Ile Gly Val Ala Ile Val Ala Arg Ala Thr Leu
                   150
                                        155
Ser Leu Phe Pro Val Pro Phe Leu Leu Lys Arg Leu Asn Tyr Cys Pro
                                    170
Gly Lys Ile Leu Leu Ser His Ser Phe Cys Phe His Ala Asp Val Met
            180
                                185
Lys Leu Ala Cys Ala Asp Ile Thr Val Asn Ile Leu Tyr Gly Leu Tyr
                            200
Val Val Leu Ser Thr Val Gly Val Asp Ser Leu Leu Ile Val Met Ser
                        215
                                            220
Tyr Ser Leu Ile Leu His Thr Val Met Gly Leu Ala Ser Pro Arg Glu
                    230
                                        235
Arg Val Arg Thr Leu Asn Thr Cys Val Ser His Ile Leu Ala Val Leu
                245
                                    250
Val Phe Tyr Ile Pro Val Ile Gly Val Ser Met Ile His Arg Phe Gly
                                265
           260
Lys His Leu Pro His Ile Val His Ala Leu Val Ala Tyr Val Tyr Leu
                            280
                                                285
Val Val Pro Pro Val Leu Asn Pro Ile Ile Tyr Ser Val Lys Ser Lys
                        295
Pro Ile Arg Gly Ala Met Phe Lys Val Leu Arg Gly Lys Asp
                    310
<210> 1311
<211> 317
<212> PRT
<213> Mus musculus
<400> 1311
Met His Thr Gly Met Ser Ile Phe Asn Leu Ser Val Thr Glu Val Ser
                                    10
Thr Phe His Leu Val Gly Phe Pro Gly Met Glu Ser Ala His Ile Trp
Ile Phe Ile Pro Ile Cys Leu Leu Tyr Thr Val Ala Ile Leu Gly Asn
```

Cys Thr Ile Leu Phe Phe Ile Lys Ser Glu Pro Ser Leu His Glu Pro

Met Tyr Tyr Phe Leu Ser Met Leu Ala Leu Ser Asp Leu Gly Leu Ser

Ile Ser Ser Leu Pro Thr Met Leu Lys Val Phe Leu Phe Asn Ser Pro

Asp Ile Ser Pro Asn Glu Cys Phe Ala Gln Glu Phe Phe Ile His Glu 105

75

110

90

55

70

```
Phe Ser Ala Met Glu Ser Ser Val Leu Leu Ile Met Ser Phe Asp Arg
        115
                            120
Tyr Ile Ala Ile Cys Asn Pro Leu Arg Tyr Thr Ser Ile Leu Thr Ser
                        135
                                            140
Ala Arg Val Leu Gln Ile Gly Leu Ala Phe Ser Leu Lys Asn Val Leu
                                        155
Leu Ile Leu Pro Phe Pro Val Thr Leu Val Arg Leu Arg Tyr Cys Lys
                165
                                    170
Lys Asn Leu Leu Ser His Ser Tyr Cys Leu His Gln Asp Val Met Lys
                               185
Leu Ala Cys Ser Asp Asn Lys Phe Asn Val Ile Tyr Gly Leu Phe Val
       195
                            200
Ala Leu Thr Gly Ile Leu Asp Ile Thr Phe Ile Phe Met Ser Tyr Ala
                        215
                                            220
Leu Ile Leu Arg Ala Val Leu Gly Ile Ala Ser Gln Arg Glu Arg Leu
                   230
                                        235
Lys Val Leu Ser Thr Cys Val Ser His Ile Cys Ala Val Leu Ile Phe
                245
                                    250
Tyr Val Pro Val Ile Ser Leu Ala Val Ile Tyr Arg Leu Ala Ser Arg
                                265
Ser Ser Pro Ile Ser Lys Ile Leu Met Ala Asp Ile Phe Leu Leu Val
                            280
                                                285
Pro Pro Val Met Asn Pro Ile Ile Tyr Cys Val Lys Ser Gln Gln Ile
                       295
Arg Asn Val Ile Leu Glu Lys Leu Cys Gln Lys Gln Ser
                    310
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1312

Met Ile Leu Asn Thr Ser Glu Val Glu Ile Ser Ser Phe Leu Leu Ile 10 Gly Ile Pro Gly Phe Glu His Met His Ile Trp Ile Ser Ile Pro Ile 25 Cys Leu Met Tyr Leu Thr Ala Ile Leu Gly Asn Cys Thr Ile Leu Cys 40 Val Ile Arg Thr Glu Pro Ser Leu His Glu Pro Met Tyr Tyr Phe Leu 55 Ser Met Leu Ala Phe Ser Asp Leu Gly Leu Ser Phe Ser Ser Ile Pro 70 75 Thr Met Leu Arg Ile Phe Leu Phe Asn Ala Met Gly Ile Ser Thr Asp 90 Ala Cys Ile Ala Gln Glu Phe Phe Ile His Gly Phe Thr Asp Met Glu 100 105 Ser Ser Val Leu Leu Ile Met Ser Phe Asp Arg Phe Val Ala Ile Arg 120 125 His Pro Leu Arg Tyr Ser Ala Ile Leu Thr Ser Ser Arg Val Val Gln 135 140 Ile Gly Leu Ala Phe Ser Val Lys Ser Ile Leu Leu Val Leu Pro Leu 150 155 Pro Phe Thr Leu Lys Arg Leu Arg Tyr Cys Asn Lys Arg Leu Leu Ser 170 His Ser Tyr Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Ser Asp

180 185 Asn Arg Val Asn Phe Tyr Tyr Gly Leu Phe Val Ala Leu Cys Met Met 200 Ser Asp Ser Val Phe Ile Ala Val Ser Tyr Val Phe Ile Leu Lys Thr 215 Val Leu Gly Ile Ala Ser His Gly Glu Arg Leu Lys Ala Leu Asn Thr 230 235 Cys Val Ser His Ile Cys Ala Val Leu Ile Phe Tyr Val Pro Ile Ile 245 250 Thr Leu Ala Thr Met His Arq Phe Ala Lys His Lys Ser Pro Leu Ala 265 260 Met Ile Leu Ile Ala Asp Ala Phe Leu Leu Val Pro Pro Leu Met Asn 280 Pro Ile Val Tyr Cys Val Lys Thr Arg Gln Ile Arg Val Lys Val Leu 295 Glu Lys Leu Gly Leu His Ser Lys

<210> 1313

<211> 312

<212> PRT

<213> Mus musculus

<400> 1313

Met Thr Pro Gly Pro Leu Gly Asn Gly Ser Met Ser Ser Thr Phe Leu 10 Leu Ser Gly Ile Pro Gly Leu Glu His Met His Ile Trp Ile Ser Leu 20 25 Pro Leu Cys Leu Met Tyr Leu Val Ser Ile Leu Gly Asn Cys Thr Ile 40 Leu Phe Ile Ile Lys Thr Glu Pro Ser Leu His Glu Pro Met Tyr Leu 55 60 Phe Leu Ser Met Leu Ala Leu Thr Asp Leu Gly Leu Ser Leu Cys Thr 75 Leu Pro Thr Val Leu Gly Ile Phe Trp Val Gly Ala Arg Asp Ile Ser 90 8.5 His Asp Ala Cys Phe Thr Gln Leu Phe Phe Ile His Cys Leu Ser Phe 105 Leu Glu Ser Ser Val Leu Leu Ser Met Ala Phe Asp Arg Phe Val Ala 120 125 Ile Cys Arg Pro Leu His Tyr Ala Ser Ile Leu Thr His Thr Val Ile 135 140 Val Arg Ile Gly Leu Ala Ser Leu Gly Arg Ser Val Ala Leu Ile Phe 155 150 Pro Leu Pro Phe Met Leu Lys Arg Phe Pro Tyr Cys Gly Ser Leu Val 170 Leu Ser His Ser Tyr Cys Leu His Gln Glu Val Met Lys Leu Ala Cys 180 185 Ala Asp Ile Lys Ala Asn Ser Ile Tyr Gly Met Phe Val Ile Val Ser 200 Thr Val Gly Val Asp Ser Leu Leu Ile Leu Phe Ser Tyr Ala Leu Ile 215 Leu Arg Thr Val Leu Ser Ile Ala Ser Arg Ala Glu Arg Leu Lys Ala 230 235 Leu Asn Thr Cys Val Ser His Ile Ser Ala Val Leu Leu Phe Tyr Thr 245 250

Pro Met Ile Gly Leu Ser Val Ile His Arg Phe Gly Lys Gln Ala Pro 260 265 His Leu Val Gln Val Val Met Gly Phe Val Tyr Leu Leu Phe Pro Pro 280 Val Met Asn Pro Ile Val Tyr Ser Val Lys Thr Lys Gln Ile Arg Asp 295 Arg Val Ala His Ala Phe Cys Asn 310

<210> 1314 <211> 311 <212> PRT <213> Mus musculus

<400> 1314

Met Ser Asn Val Thr Leu Val Thr Thr Phe Phe Leu Ser Gly Ile Pro 10 His Pro Pro Ala Leu Asp Thr Met Leu Phe Val Ala Phe Leu Val Ile Tyr Ile Leu Thr Val Leu Gly Asn Phe Leu Ile Leu Met Val Ile Arg 40 Val Asp Ser His Leu His Thr Pro Met Tyr Tyr Phe Leu Thr Asn Leu 5.5 Ser Phe Ile Asp Met Trp Phe Ser Thr Val Thr Val Pro Lys Met Leu 70 75 Met Thr Leu Val Ser Pro Arg Gly Gly Ala Ile Ser Phe His Ser Cys 85 Val Ala Gln Leu Tyr Cys Phe His Phe Leu Gly Ser Thr Glu Cys Phe 100 105 Leu Tyr Thr Val Met Ser Tyr Asp Arg Tyr Leu Ala Ile Ser Tyr Pro 120 Leu Arg Tyr Ser Ser Met Met Ser Gly Arg Val Cys Ala Leu Leu Ala 135 Ala Gly Thr Trp Ile Thr Gly Ser Leu His Ser Ala Val Gln Thr Thr 150 155 Leu Thr Phe Arg Leu Pro Tyr Cys Gly Pro Asn Gln Ile Gln His Tyr 165 170 Phe Cys Asp Ala Pro Pro Ile Leu Lys Leu Ala Cys Ala Asp Thr Ser 185 Ala Asn Glu Met Val Ile Phe Val Asn Ile Gly Val Val Ala Ser Gly 200 Cys Phe Leu Leu Ile Ser Leu Ser Tyr Val Ser Ile Val Cys Ser Ile 215 220 Leu Arg Ile Arg Thr Ser Glu Gly Arg His Arg Ala Phe Gln Thr Cys 230 235 Ala Ser His Cys Ile Val Val Leu Cys Phe Phe Val Pro Cys Val Phe 245 250 Ile Tyr Leu Arg Pro Gly Ser Arg Asp Ala Val Asp Gly Val Val Ala 265 Val Phe Tyr Thr Val Leu Thr Pro Leu Leu Asn Pro Val Val Tyr Thr 280 285 Leu Arg Asn Lys Glu Val Lys Lys Ala Leu Val Lys Leu Lys Asp Lys 295 300 Val Ala Tyr Ser Gln Ser Gln 305

```
<212> PRT
<213> Mus musculus
<400> 1315
Met Ser Pro Gly Asn His Ser Glu Ala Ser Leu Phe Val Leu Glu Gly
Leu Thr Asp Gln Pro Gly Leu Gln Ile Pro Leu Phe Ser Leu Phe Leu
           2.0
                               25
Leu Ile Tyr Leu Val Ser Met Ala Gly Asn Leu Gly Leu Val Phe Leu
                           40
Ile Arg Ile Ser Ser Gln Leu His Thr Pro Met Tyr His Phe Leu Ser
                       55
                                           60
Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Ile Ile Pro Lys
                                        75
Met Leu Val Asn Phe Val Ser Glu Lys Asn Phe Thr Ala Phe Pro Glu
                                   90
Cys Met Val Gln Leu Phe Leu Phe Ser Phe Phe Gly Ile Asp Asp Ser
                               105
Tyr Met Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                           120
Pro Leu Leu Tyr Asn Val Thr Met Ser His Arg Val Cys Met Leu Leu
                       135
                                            140
Ser Thr Ala Val Tyr Ala Met Gly Ala Phe Gly Ala Thr Val His Thr
                   150
                                       155
Ser Tyr Ile Ser Ser Arg Ser Phe Cys Gly Thr Asn Val Ile His His
               165
                                   170
Tyr Phe Cys Asp Ile Leu Pro Leu Ile Asn Ile Ala Cys Ser Arg Asp
                               185
Tyr Thr Lys Glu Phe Trp Val Met Ile Leu Val Gly Phe Asn Val Phe
                            200
Ala Ser Val Phe Ser Ile Phe Ile Ser Tyr Ala Phe Ile Leu Ala Ser
                        215
Ile Leu Arg Ile Arg Ser Ala Asp Gly Arg Ser Lys Ala Phe Ser Thr
                   230
                                        235
Cys Ser Ser His Leu Ala Ala Val Gly Val Phe Tyr Gly Ser Ile Ile
                                   250
               245
Phe Met Tyr Phe Lys Pro Ser Thr Gly Asn Thr Thr Gln Glu Lys Val
           260
                               265
Ala Ser Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Leu Ile
                           280
                                . 285
Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Ile Lys Lys Ala Leu
                       295
Asn Ser Gly Leu Phe Ser
305
<210> 1316
<211> 310
<212> PRT
<213> Mus musculus
<400> 1316
Met Leu Asn Gly Ser Val Val Thr Thr Phe Phe Leu Ser Gly Leu Pro
                                    10
```

<210> 1315 <211> 310

```
His Pro Pro Val Leu Asp Ser Met Leu Phe Gly Ile Phe Leu Val Ile
                                25
Tyr Ile Leu Thr Val Leu Gly Asn Leu Leu Ile Leu Met Val Ile Arg
Val Asp Ser His Leu His Thr Pro Met Tyr Tyr Phe Leu Thr Asn Leu
Ser Phe Ile Asp Met Trp Phe Ser Thr Val Thr Val Pro Lys Met Leu
                   70
                                        75
Met Thr Leu Val Ser Thr Gly Gly Gly Ala Ile Ser Phe His Ser Cys
Val Ala Gln Leu Tyr Cys Phe His Phe Leu Gly Ser Thr Glu Cys Phe
                                105
Leu Tyr Thr Val Met Ser Tyr Asp Arg Tyr Leu Ala Ile Ser Tyr Pro
                           120
       115
                                                125
Leu Arg Tyr Ser Ser Met Met Ser Gly Arg Val Cys Ala Leu Leu Ala
                       135
                                            140
Ala Gly Thr Trp Ile Thr Gly Ser Leu His Ser Ala Val Gln Thr Thr
                    150
                                        155
Leu Ile Phe His Leu Pro Tyr Cys Gly Pro Asn Glu Ile Gln His Tyr
                                    170
Phe Cys Asp Gly Pro Pro Ile Leu Lys Leu Ala Cys Ala Asp Thr Ser
            180
                                185
Ala Ile Glu Met Val Ile Phe Val Asn Ile Gly Val Val Ala Ser Gly
                           200
Cys Phe Phe Leu Ile Ser Leu Ser Tyr Val Ser Ile Val Cys Ser Ile
                        215
                                            220
Leu Arg Ile Arg Thr Ser Glu Gly Arg His Arg Ala Phe Gln Thr Cys
                   230
                                        235
Ala Ser His Cys Ile Val Val Leu Cys Phe Phe Val Pro Cys Val Phe
               245
                                   250
Ile Tyr Leu Arg Pro Gly Ser Arg Asp Ala Val Asp Gly Val Val Thr
                                265
Val Phe Tyr Thr Val Leu Thr Pro Leu Leu Asn Pro Val Val Tyr Thr
                            280
Leu Arg Asn Lys Glu Val Lys Lys Ala Leu Phe Lys Leu Lys Asp Lys
                        295
Val Ala Phe Ser Gln Arg
305
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1317

 Met
 Ser
 Asn
 Thr
 Ser
 Ile
 Val
 Thr
 Thr
 Phe
 Phe
 Leu
 Ser
 Gly
 Leu
 Pro

 His
 Pro
 Val
 Leu
 Asp
 Ser
 Met
 Leu
 Phe
 Gly
 Ile
 Phe
 Leu
 Val
 Ile
 Ile
 Asp
 Ile
 Leu
 Fhe
 Leu
 Ile
 Ile

```
85
                                    90
Val Ala Gln Leu Tyr Cys Phe His Phe Leu Gly Ser Thr Glu Cys Phe
                               105
Leu Tyr Thr Val Met Ser Tyr Asp Arg Tyr Leu Ala Ile Ser Tyr Pro
                            120
Leu Arg Tyr Ser Ser Met Met Gly Gly Arg Met Cys Ala Leu Leu Ala
                        135
                                            140
Ala Gly Thr Trp Leu Thr Gly Ser Leu His Ser Ala Val Gln Thr Thr
                   150
                                        155
Leu Thr Phe His Leu Pro Tyr Cys Gly Pro Asn Gln Ile Gln His Tyr
                                    170
               165
Phe Cys Asp Ala Pro Pro Ile Leu Lys Leu Ala Cys Ala Asp Thr Ser
                                185
Ala Asn Glu Met Val Ile Phe Val Asn Ile Gly Val Val Ala Ser Gly
       195
                           200
                                                205
Cys Phe Phe Leu Ile Ser Leu Ser Tyr Val Ser Ile Val Cys Ser Ile
                        215
Leu Arg Ile Arg Thr Ser Glu Gly Arg His Arg Ala Phe Gln Thr Cys
                    230
                                        235
Ala Ser His Cys Ile Val Val Leu Cys Phe Phe Gly Pro Gly Leu Phe
                245
                                    250
Ile Tyr Leu Arg Pro Gly Ser Arg Asp Ala Val Asp Gly Ile Val Ala
                               265
Val Phe Tyr Thr Val Leu Thr Pro Leu Leu Asn Pro Val Val Tyr Thr
                           280
Leu Arg Asn Lys Glu Val Lys Lys Ala Leu Leu Lys Ile Lys Tyr Gly
                       295
                                            300
Ser Val Leu Pro Gln Asp Lys
                    310
```

<211> 316

<212> PRT

<213> Mus musculus

<400> 1318

Met Phe Cys Asn Thr Ser Thr Pro Gly His Ser Thr Phe Leu Leu Thr Gly Phe Pro Gly Leu Glu Ala Ser His His Trp Val Ser Ile Pro Ile 20 25 Asn Leu Ile Cys Val Val Ser Ile Leu Gly Asn Ser Val Ile Leu Phe 40 45 Leu Ile Arg Thr Asp Pro Ala Leu His Glu Pro Met Phe Ile Phe Leu 55 Ser Met Leu Ala Ala Ser Asp Leu Gly Leu Cys Ala Ser Thr Phe Pro 75 Thr Met Val Arg Leu Phe Trp Leu Gly Thr Arg Glu Leu Pro Phe Asp Phe Cys Ala Ala Gln Met Phe Phe Ile His Ala Phe Thr Tyr Val Glu 100 105 110 Ser Gly Val Leu Leu Ala Met Ala Phe Asp Arg Phe Ile Ala Ile Arg 120 Asn Pro Leu His Tyr Ala Thr Ile Leu Pro His Ser Ala Val Ala Lys 135 140 Val Gly Ala Ala Val Leu Val Arg Ala Ile Leu Leu Asn Leu Pro Gly 150 155

Pro Ile Leu Leu Arg Arg Leu Ile Phe Pro Gln Ile Ser Thr Leu Ser 165 170 His Cys Tyr Cys Leu His Cys Asp Leu Val Gly Leu Ala Cys Ser Asp 185 Thr Arg Ile Asn Ser Leu Val Gly Leu Val Ser Ile Leu Leu Ser Leu 200 Gly Leu Asp Ser Ser Leu Ile Met Leu Ser Tyr Ala Leu Ile Leu Arg 215 Thr Val Leu Gly Ile Ala Ser Pro Gly Glu Arg Leu Lys Ala Leu Asn 230 235 Thr Cys Val Ser His Leu Cys Ile Val Leu Ile Phe Tyr Leu Pro Lys 245 250 Leu Gly Leu Ser Val Leu His Arg Val Glu Lys His Ser Tyr Pro Ala 260 265 Leu Ala Val Leu Met Ala Asn Leu His Phe Leu Val Pro Pro Phe Met 280 285 Asn Pro Val Val Tyr Cys Ile Lys Ser Lys Gln Ile Arg Gln Gly Phe 295 Leu Arg Arg Phe Gln Gln Lys Arg Val Asp Ile Ser 310

<210> 1319 <211> 315

<212> PRT

<213> Mus musculus

<400> 1319

Met Asn Ser Asn Ala Ser Gln Thr Asn His His Ser Phe Ile Leu Thr 5 1.0 Gly Ile Pro Gly Met Pro Asp Lys Asn Pro Trp Met Ala Phe Pro Leu Gly Phe Leu Tyr Thr Leu Thr Leu Leu Gly Asn Gly Thr Ile Leu Ala 40 Val Val Lys Val Glu Gln Ser Leu His Glu Pro Met Tyr Tyr Phe Leu 55 Cys Ile Leu Ala Leu Thr Asp Val Ser Leu Ser Met Ser Thr Leu Pro 70 7.5 Ser Met Leu Ser Ile Phe Trp Phe Asn Ala Pro Glu Ile Pro Phe Asp 8.5 90 Ala Cys Ile Thr Gln Met Phe Phe Ile His Gly Phe Gly Val Val Glu 100 105 Ser Gly Val Leu Val Ser Met Ala Phe Asp Arg Phe Val Ala Ile Arg 115 120 125 Asp Pro Leu Arg Tyr Ala Ser Ile Leu Thr His Gly Leu Ile Gly Lys 135 140 Ile Gly Leu Val Val Leu Ala Arg Ala Val Cys Val Val Phe Pro Val 150 155 Pro Phe Leu Ile Lys Arq Leu Pro Phe Cys Arq Ser Asn Val Leu Ser 165 170 His Ser Tyr Cys Leu His Gln Asp Ala Met Arg Leu Ala Cys Ala Ser 180 185 190 Thr Arg Val Asn Ser Leu Tyr Gly Leu Ile Val Val Ile Leu Thr Leu 200 205 Gly Leu Asp Ala Leu Ile Ile Leu Phe Ser Tyr Val Leu Ile Leu Lys 215 220 Thr Val Leu Gly Ile Ala Ser Arg Ala Glu Arg Leu Lys Ala Leu Asn

```
225
                   230
                                       235
Thr Cys Leu Ser His Ile Cys Ala Val Leu Leu Phe Tyr Ile Pro Leu
               245
                                   250
Ile Gly Ala Thr Met Ile His Arg Phe Gly Lys His Leu Ser Pro Val
            260
                                265
Val His Met Phe Met Ala Asn Ile Tyr Leu Leu Leu Pro Pro Val Leu
                            280
Asn Pro Ile Val Tyr Ser Val Lys Thr Lys Gln Ile Arg Arg Ile
                       295
Ile Gln Val Phe Arg Gly Arg Lys Asn Met Ser
                    310
<210> 1320
<211> 317
<212> PRT
<213> Mus musculus
<400> 1320
Met Leu Val Asn Asn Ile Thr Ser Thr His Pro Val Ala Phe Leu Leu
Met Gly Ile Pro Gly Leu Glu His Leu His Ile Trp Ile Ser Ile Pro
                                25
Phe Cys Ser Ala Tyr Thr Leu Ala Val Leu Gly Asn Cys Thr Leu Leu
                           40
Phe Ile Ile Arg Val Asp Ala Ala Leu His Glu Thr Met Tyr Leu Phe
                        55
Leu Ala Met Leu Ala Ala Ile Asp Leu Val Leu Ser Ser Ser Thr Leu
                                        75
Pro Lys Met Leu Ser Leu Phe Trp Phe Arg Asp Arg Glu Ile Asn Phe
               85
                                    90
His Ala Cys Leu Ile Gln Met Phe Phe Leu His Ser Phe Ala Ile Met
                                105
                                                    110
Glu Ser Ala Met Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile
                            120
Cys Lys Pro Leu His Tyr Thr Thr Ile Leu Thr Lys Pro Leu Ile Ile
                        135
                                            140
Lys Ile Gly Leu Ala Ala Val Thr Arg Ala Val Thr Leu Met Thr Pro
                   150
                                       155
Leu Pro Phe Leu Leu Arg Arg Phe His Tyr Cys Arg Gly Thr Val Ile
                                   170
               165
Ala His Cys Tyr Cys Glu His Met Ala Val Val Arg Leu Ala Cys Gly
           180
                               185
Asp Thr Arg Phe Asn Asn Ile Tyr Gly Ile Ala Val Ala Met Phe Ile
                           200
                                                205
Val Val Leu Asp Leu Leu Phe Val Ile Leu Ser Tyr Ile Phe Ile Leu
                        215
Arg Ala Val Leu Gln Leu Ala Ser Gln Glu Ala Arg Tyr Lys Ala Phe
                    230
                                        235
Gly Thr Cys Val Ser His Ile Gly Ala Ile Leu Ala Phe Tyr Thr Pro
                245
                                    250
Val Val Ile Ser Ser Val Met His Arg Val Ala Arg Arg Ala Ala Pro
                               265
His Val His Ile Leu Leu Ala Asn Phe Tyr Leu Leu Phe Pro Pro Met
                           280
                                                285
Val Asn Pro Ile Ile Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu Arg
```

295

290 295 300
Val Leu Ser Ser Leu Ser Ser Gln Trp Lys Leu Arg

310

```
<210> 1322
```

305

<211> 317

<212> PRT

<213> Mus musculus

```
<400> 1322
Met Ser Asp Val Asn Thr Thr Ser Asn Trp Pro Thr Phe Ser Phe Ile
Gly Ile Pro Gly Leu Glu Ala Ala His Met Trp Ile Ser Ile Pro Phe
Cys Leu Leu Tyr Leu Val Ala Leu Gly Gly Asn Val Leu Leu Leu Leu
                            40
Leu Val Arg Ala Glu Gln Asn Leu His Glu Pro Gln Phe Tyr Phe Leu
                       5.5
Ala Met Leu Ala Leu Thr Asp Leu Gly Leu Ser Leu Ser Thr Met Pro
                    70
                                        75
Ser Val Leu Ala Ile Phe Trp Phe Asp Val His Asn Val Gly Leu Asp
                                    90
Ala Cys Leu Thr Gln Met Phe Phe Ile His Thr Leu Ser Ser Val Glu
           100
                               105
Ser Gly Val Leu Val Ala Met Ala Phe Asp Arg Leu Val Ala Ile Cys
                           120
Ala Pro Leu Thr Tyr Thr Arg Ile Leu Asn His Gln Thr Val Leu Cys
                        135
Leu Ser Gly Ala Ala Leu Ile Arg Gly Ala Thr Leu Leu Ala Pro Leu
                    150
                                        155
Pro Phe Phe Leu Arg Thr Phe Pro Phe Cys Gly Ala Asn Ile Leu Ser
               165
                                   170
His Ser Tyr Cys Tyr Tyr Pro Asp Met Leu Asn Leu Ala Cys Gly Asp
                                185
Val Thr Phe Ser Ser Val Tyr Gly Leu Val Cys Val Leu Cys Thr Phe
                           200
Ala Val Asp Val Ile Phe Ile Leu Val Ser Tyr Met Lys Ile Leu Gly
                       215
                                           220
Thr Val Met Lys Leu Gly Ile Gln Asp Arg Asn Trp Lys Ser Leu Gln
                   230
                                       235
Thr Cys Val Cys His Leu Cys Thr Val Leu Val Phe Tyr Leu Pro Leu
                245
                                    250
Ile Ser Leu Ala Val Leu His Arg Tyr Thr Gln Glu Thr Ser Pro Ile
                                265
Leu Tyr Thr Thr Met Ser Asn Ala Tyr Leu Leu Met Thr Pro Leu Leu
                           280
                                               285
Asn Pro Leu Val Tyr Ser Leu Lys Ser Arg Gln Ile Gln Ala Ala Leu
                       295
Arg Lys Arg Phe Gly Val Gln Arg Val Val Ala Gly Glu
                    310
<210> 1323
<211> 317
<212> PRT
<213> Mus musculus
<400> 1323
Met Glu Ile Thr Asn Ser Ser Trp Phe Gln Pro Pro Thr Leu Leu Leu
                                   10
Thr Gly Ile Pro Gly Leu Glu Asp Val Gln Ile Trp Phe Cys Ile Pro
                                25
Leu Cys Val Met Tyr Leu Ile Ala Leu Leu Gly Asn Cys Thr Ile Leu
                           40
Phe Val Ile Arg Thr Thr Ser Ser Leu His Glu Pro Gln Tyr Ile Phe
                        55
                                            60
```

```
Leu Ser Met Leu Ala Ala Thr Asp Val Gly Leu Ser Val Ser Thr Leu
                    70
                                        75
Pro Thr Val Leu Asn Val Phe Leu Leu Asn His Arg Asp Ile Glu Phe
His Ser Cys Leu Thr Gln Met Phe Phe Ile His Thr Phe Ser Ser Met
                                105
Glu Ser Ala Ile Leu Leu Ala Met Ala Phe Asp Arg Phe Val Ala Ile
                            120
                                                125
Arg Asn Ser Leu His Tyr Thr Ala Val Leu Thr Pro Thr Arg Ile Ile
                       135
Lys Ile Gly Leu Ala Ala Val Val Arg Gly Val Met Leu Met Ile Pro
                   150
                                        155
Leu Pro Ile Leu Leu Lys Arg Leu Pro Phe Cys Lys Gly Val Ile Leu
               165
                                    170
                                                        175
Ser His Cys Tyr Cys Tyr His Pro Asp Ile Met Lys Leu Ala Cys Gly
           180
                               185
Pro Val Arg Val Asn Ile Ile Tyr Gly Leu Ser Leu Val Leu Cys Ser
                            200
Phe Gly Val Asp Ser Val Phe Ile Val Ile Ser Tyr Ile Leu Ile Leu
                        215
Lys Thr Val Leu Gly Ile Ala Ser Gly Asp Gly Lys Leu Lys Ala Leu
                    230
                                        235
Asn Thr Cys Val Ser His Ile Phe Thr Val Phe Ile Phe Tyr Val Pro
                                   250
Leu Ile Val Leu Ala Leu Ile His Arg Phe Gly Thr Phe Ala Ser Pro
                               265
           260
Leu Leu His Val Thr Met Ala Asn Leu Phe Leu Phe Leu Thr Pro Val
                           280
Leu Asn Pro Leu Val Tyr Ser Leu Lys Thr Lys Gln Ile Arg Ser Ala
                       295
Val Cys Lys Ile Phe Lys Val Trp Gly Asn Leu Leu Lys
```

<211> 319

<212> PRT

<213> Mus musculus

<400> 1324

Met Ala Thr Ser Asn Ser Ser Thr Ile Val Ser Ser Thr Phe Tyr Leu 10 Thr Gly Ile Pro Gly Tyr Glu Glu Phe His His Trp Ile Ser Ile Pro 25 Phe Cys Phe Leu Tyr Leu Val Gly Ile Thr Gly Asn Cys Met Ile Leu 40 His Ile Val Arg Thr Asp Pro Arg Leu His Glu Pro Met Tyr Tyr Phe 55 Leu Ala Met. Leu Ser Leu Thr Asp Met Ala Met Ser Leu Pro Thr Met 75 Met Ser Leu Phe Arg Val Leu Trp Ser Ile Ser Arg Glu Ile Gln Phe 85 90 Asn Ile Cys Val Val Gln Met Phe Leu Ile His Thr Phe Ser Phe Thr 100 105 Glu Ser Ser Val Leu Leu Ala Met Ala Leu Asp Arg Tyr Val Ala Ile 120 Cys His Pro Leu Arg Tyr Ala Thr Ile Leu Thr Pro Lys Leu Ile Ala

```
130
                      135
Lys Ile Gly Thr Ala Ala Leu Leu Arg Ser Ser Ile Leu Ile Ile Pro
                  150
                                      155
Leu Ile Ala Arg Leu Ala Phe Phe Pro Phe Cys Gly Ser His Val Leu
               165
                                   170
Ser His Ser Tyr Cys Leu His Gln Asp Met Ile Arg Leu Ala Cys Ala
           180
                               185
Asp Ile Arg Phe Asn Val Ile Tyr Gly Leu Val Leu Ile Thr Leu Leu
                          200
Trp Gly Met Asp Ser Leu Gly Ile Phe Val Ser Tyr Val Leu Ile Leu
                      215
                                          220
His Ser Val Leu Lys Ile Ala Ser Arg Glu Gly Arg Leu Lys Ala Leu
        230
                                      235
Asn Thr Cys Ala Ser His Ile Cys Ala Val Leu Ile Leu Tyr Val Pro
              245
                                 250
Met Ile Gly Leu Ser Ile Val His Arg Phe Ala Lys His Ser Ser Pro
                              265
Leu Ile His Ile Phe Met Ala His Ile Tyr Leu Leu Val Pro Pro Val
                           280
Leu Asn Pro Ile Ile Tyr Ser Val Lys Thr Lys Gln Ile Arg Glu Gly
                       295
Ile Leu His Leu Cys Ser Pro Lys Ile Ser Ser Ile Thr Met
                                       315
                   310
```

<211> 316

<212> PRT

<213> Mus musculus

<400> 1325

Met Pro His Leu Asn Ser Thr Ile Phe Arg Pro Ser Val Leu Thr Leu 1.0 Thr Gly Ile Pro Gly Leu Glu Ser Val Gln Phe Trp Ile Gly Ile Pro 25 Phe Cys Ile Met Tyr Ile Ile Ala Leu Leu Gly Asn Ser Leu Leu Leu 4.0 Val Val Ile Lys Val Glu Arg Ser Leu His Glu Pro Met Tyr Leu Phe 55 Leu Ala Met Leu Gly Ala Thr Asp Ile Ser Leu Ser Thr Ser Ile Leu 7.0 75 Pro Lys Met Leu Gly Ile Phe Trp Phe His Leu Ser Thr Ile Tyr Phe 90 Asp Ala Cys Leu Leu Gln Met Trp Leu Ile His Thr Phe Gln Gly Ile 105 100 Glu Ser Gly Ile Leu Phe Ala Met Ala Met Asp Arg Tyr Val Ala Ile 120 Cys Asp Pro Leu Arg His Ala Ser Ile Phe Thr Gln Arg Leu Leu Thr 135 Gln Ile Gly Val Gly Val Thr Leu Arg Ala Ala Leu Phe Val Ala Pro 150 155 Cys Leu Phe Leu Ile Lys Cys Arg Leu Lys Phe Tyr Trp Thr Thr Val 170 Val Ser His Ser Tyr Cys Glu His Met Ala Ile Val Lys Leu Ala Ala 180 185 190 Glu Asp Val His Val Asn Lys Ile Tyr Gly Leu Phe Val Ala Phe Ser 200

```
      Ile
      Leu
      Gly
      Leu
      Asp
      Ile
      Ile
      Phe
      Ile
      Thr
      Leu
      Ser
      Tyr
      Ile
      Arg
      Ile

      Phe
      Ile
      Thr
      Val
      Phe
      Lys
      Leu
      Pro
      Gln
      Lys
      Glu
      Ala
      Arg
      Leu
      Lys
      Ala

      225
      230
      230
      235
      235
      240
      240

      Phe
      Asn
      Thr
      Cys
      Val
      Ala
      Eu
      Phe
      Leu
      Phe
      Leu
      Phe
      Leu
      Phe
      Leu
      Phe
      Tyr
      Leu
      Phe
      Tyr
      Leu
      Phe
      Tyr
      Leu
      Phe
      Phe
      Tyr
      Leu
      Phe
      Tyr
      Leu
      Phe
      Tyr
      Phe
      Phe
      Tyr
      Leu
      Phe
      Tyr
      Phe
      Phe
      Phe
      Tyr
      Phe
      Phe
      Tyr
      Phe
      Ph
```

<210> 1326 <211> 318 <212> PRT

<213> Mus musculus

<400> 1326

Met Ser Gly Ala Asn Ser Ser Ser Leu Thr Pro Glu Phe Phe Ile Leu Asn Gly Val Pro Gly Leu Glu Asp Ala His Val Trp Ile Ser Leu Pro 25 Phe Cys Phe Met Tyr Met Ile Ala Val Val Gly Asn Cys Gly Leu Ile 40 Tyr Leu Ile Gly His Glu Glu Ala Leu His Arg Pro Met Tyr Tyr Phe 55 Leu Ala Leu Leu Ser Phe Thr Asp Val Thr Leu Cys Thr Thr Thr Val Pro Asn Met Leu Cys Ile Phe Trp Phe Asn Phe Lys Lys Ile Gly Phe 85 90 Asn Ser Cys Leu Val Gln Met Phe Phe Val His Met Leu Thr Gly Met 100 105 Glu Ser Gly Val Leu Met Leu Met Ala Leu Asp Arg Tyr Val Ala Ile 120 125 Cys Tyr Pro Leu Arg Tyr Thr Thr Ile Leu Thr Asn Pro Val Ile Ala 135 140 Lys Ala Gly Leu Ala Thr Phe Leu Arg Ser Val Met Leu Ile Phe Pro 150 155 Phe Thr Leu Leu Thr Lys Arg Leu Pro Tyr Cys Arg Gly Ser Leu Ile 165 170 Pro His Thr Tyr Cys Asp His Met Ser Val Ala Lys Val Ser Cys Gly 185 Asn Ala Lys Val Asn Ala Ile Tyr Gly Leu Met Val Ala Leu Leu Ile 200 Gly Val Phe Asp Ile Cys Cys Ile Ser Val Ser Tyr Thr Met Ile Leu 215 220 Arg Ala Val Val Ser Leu Ser Ser Ala Asp Ala Arg His Lys Ala Phe 230 235 Ser Thr Cys Thr Ser His Ile Cys Ala Ile Val Ile Thr Tyr Val Pro 245 250 Ala Phe Phe Thr Phe Phe Thr His Arg Phe Gly Gly His Thr Ile Pro 265 His His Val His Ile Ile Val Ala Asn Leu Tyr Leu Leu Pro Pro

<210> 1327 <211> 317 <212> PRT <213> Mus musculus

<400> 1327

Met Pro Asn Ile Asn Leu Leu Gln Asn Ala Pro Ser Asn Ile Thr Glu 5 10 Ala His Pro Leu Ser Phe Leu Leu Gly Ile Pro Gly Leu Glu Ala 25 Thr Gln Phe Trp Leu Gly Phe Pro Phe Cys Val Val Tyr Leu Thr Ala Leu Val Gly Asn Leu Ile Ile Leu Phe Val Ile Trp Thr Asp Arg Thr 55 Phe His Gln Pro Met Phe Tyr Phe Leu Ala Met Leu Ser Val Ile Asp 70 75 Leu Ser Leu Ser Thr Ala Thr Ile Pro Lys Met Leu Gly Ile Phe Trp 90 85 Phe Ser Leu Gln Glu Leu Cys Phe Ala Cys Cys Val Ala Gln Val Phe 105 Phe Ile His Phe Phe Thr Val Met Glu Ser Ile Val Leu Leu Ala Met 120 125 115 Gly Phe Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg Tyr Thr Thr 135 Ile Leu Thr Asn Arg Ile Ile Val Val Ile Ala Val Leu Val Val Ile 150 155 Arg Ser Leu Cys Met Ile Val Pro Ile Ile Phe Leu Leu Arg Leu 165 170 Pro Tyr Cys Gly His Arg Ile Ile Pro His Thr Tyr Cys Glu His Met 180 185 Gly Val Ala Arg Leu Ala Cys Ala Ser Ile Arg Ala Asn Ile Tyr Phe 200 205 Gly Leu Gly Asn Ile Ser Ile Leu Phe Leu Asp Val Phe Leu Ile Ile 215 220 Val Ser Tyr Ala Arg Ile Leu Tyr Ala Val Phe His Leu Pro Ser Gln 230 235 Asp Ala Arg Leu Lys Ala Leu Asn Thr Cys Ser Ser His Ile Cys Val 245 250 Ile Leu Ala Phe Phe Gly Pro Ala Leu Phe Ser Phe Leu Thr His Arg 265 Phe Gly His Asn Ile Pro Gln Tyr Ile His Ile Leu Leu Ala Asn Leu 280 Tyr Val Val Ile Pro Pro Ala Leu Asn Pro Val Ile Tyr Gly Ile Arg 295 Thr Lys Gln Ile Gln Gln Arg Val Lys Asn Leu Phe Val 310

<400> 1328 Met Ala Pro Ser Asn Ser Ser Val Ser Val Ser Ser Thr Phe Tyr Leu Thr Gly Ile Pro Gly Tyr Glu Glu Phe His His Trp Ile Ser Ile Pro 25 Phe Cys Leu Ile Tyr Ile Ile Gly Val Thr Gly Asn Cys Ser Ile Leu His Ile Val Arg Thr Asp Pro Lys Leu His Glu Pro Met Tyr Tyr Phe 55 Leu Ala Met Leu Ser Leu Thr Asp Met Ala Met Ser Leu Pro Ala Met 70 75 Val Ser Leu Phe Arg Val Leu Trp Ser Ile Ser Arg Glu Ile Gln Phe 85 90 Asn Ile Cys Val Val Gln Met Phe Leu Ile His Thr Phe Ser Phe Thr 100 105 Glu Ser Ser Val Leu Leu Ala Met Ala Leu Asp Arg Tyr Val Ala Ile 120 Cys His Pro Leu Arg Tyr Ala Thr Ile Leu Thr Pro Lys Leu Ile Ala 135 140 Lys Ile Gly Ile Ala Ala Leu Leu Arg Ser Ala Ile Pro Leu Ile Pro 150 155 Leu Leu Val Arg Leu Ala Phe Phe Ser Phe Cys Arg Ser His Val Leu 165 170 Ser His Ser Tyr Cys Leu His Gln Asp Ile Ile Arg Leu Ala Cys Ala 185 180 Asp Ile Arg Phe Asn Val Ile Tyr Gly Met Val Val Ile Leu Met Leu 200 205 Trp Gly Met Asp Ser Leu Gly Ile Leu Ile Thr Tyr Val Phe Ile Leu 215 His Ser Val Leu Arg Ile Ala Ser Arg Glu Gly Arg Leu Lys Ala Leu 230 235 Asn Thr Cys Ala Ser His Ile Cys Ala Val Leu Ile Leu Tyr Val Pro 245 250 Met Ile Gly Leu Ser Ile Val His Arg Phe Ala Lys His Ser Ser Pro 260 265 Phe Val His Ile Phe Met Ala His Ile Tyr Leu Met Val Pro Pro Val 280 285 Leu Asn Pro Ile Ile Tyr Ser Val Lys Thr Lys Gln Ile Arg Gln Gly 295 Ile Phe His Leu Ile Cys Pro His Lys Ile Asn Ser Ser Ala Met 310

```
<210> 1329
<211> 317
```

<400> 1329

Met Val Gly Phe Asn Ser Asn Glu Ser Ser Ala Thr Tyr Phe Ile Leu 1 5 5 10 10 5 15 11e Gly Leu Pro Gly Leu Glu Glu Val Gln Phe Trp Leu Ala Phe Pro 20 5 30 Leu Cys Ser Leu Tyr Leu Ile Ala Val Leu Gly Asn Leu Thr Ile Ile

<212> PRT

<213> Mus musculus

```
Tyr Ile Val Arg Thr Glu His Ser Leu His Glu Pro Met Tyr Ile Phe
Leu Cys Met Leu Ser Gly Leu Asp Ile Leu Ile Ser Thr Ser Ser Met
                                        75
Pro Lys Met Met Ala Ile Phe Trp Phe Asn Ser Thr Thr Ile Gln Phe
                                    90
                8.5
Asp Ala Cys Leu Val Gln Met Phe Ala Ile His Ser Leu Ser Gly Met
                                105
Glu Ser Thr Val Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile
                           120
                                                125
Cys His Pro Leu Arg His Ala Thr Val Leu Thr Leu Pro Arg Val Ala
                       135
                                            140
Lys Ile Gly Met Ala Ala Val Val Arg Gly Ala Val Leu Met Ala Pro
                   150
                                        155
Leu Pro Val Phe Ile Lys Arg Leu Pro Phe Cys Arg Ser Asn Ile Leu
                                    170
Ser His Ser Tyr Cys Leu His Gln Asp Val Met Lys Leu Ala Cys Ala
            180
                                185
Asp Ile Arg Val Asn Ile Ile Tyr Gly Leu Ile Val Ile Ile Ser Ala
                            200
                                                205
Ile Gly Leu Asp Ser Leu Leu Ile Ser Phe Ser Tyr Leu Leu Ile Leu
                        215
Lys Thr Val Leu Gly Leu Thr Arg Glu Ala Gln Ala Lys Ala Phe Gly
                    230
                                        235
Thr Cys Val Ser His Val Cys Ala Val Phe Ile Phe Tyr Val Pro Phe
                245
                                    250
Ile Gly Leu Ser Met Val His Arg Phe Ser Lys Arg Arg Asp Ser Leu
            260
                                265
Leu Pro Val Ile Met Ala Asn Ile Tyr Leu Leu Val Pro Pro Val Leu
                            280
Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Glu Ile Arg Gln Arg Ile
                        295
Leu Arg Leu Phe Leu Val Thr Thr His Thr Ser Asp His
                    310
<210> 1330
<211> 314
<212> PRT
<213> Mus musculus
<400> 1330
Met Pro Ser Phe Asn Glu Ser Thr Ala Tyr Pro Pro Val Phe Phe Leu
Thr Gly Ile Pro Gly Leu Glu Thr Ser His Thr Trp Ile Ser Ile Pro
Phe Cys Cys Leu Tyr Ala Ile Ala Ile Ser Gly Asn Ser Met Ile Leu
Phe Val Ile Ile Thr Glu Ser Ser Leu His Glu Pro Met Tyr Tyr Phe
                        55
Leu Ser Met Leu Ser Phe Thr Asp Leu Gly Leu Cys Leu Ser Thr Leu
                    70
                                        75
Val Thr Val Leu Gly Ile Phe Trp Phe Asn Val Arg Glu Ile Ser Phe
                                    90
```

Asp Ala Cys Ile Gly Gln Met Phe Phe Ile His Gly Phe Thr Phe Met

105

110

100

40

35

```
Glu Ser Ser Val Leu Leu Val Met Ala Phe Asp Arg Phe Ile Ala Ile
                           120
Cys Asn Pro Leu Arg Tyr Ala Met Ile Leu Thr Asn Ser Arg Ile Ile
                       135
Ala Val Gly Phe Ala Ile Ile Ile Arg Gly Thr Thr Ala Leu Val Pro
Leu Leu Leu Leu Lys Arg Leu Ser Phe Cys Arg Ser His Val Leu
                                   170
               165
His His Ser Tyr Cys Phe His Pro Asp Val Met Lys Leu Ser Cys Ser
                               185
Asp Thr Arg Ile Asn Ser Ala Phe Gly Leu Ala Ile Val Ile Ser Thr
                            200
                                                205
Ala Gly Leu Asp Ser Val Leu Ile Leu Leu Ser Tyr Val Leu Ile Ile
                       215
                                            220
His Ser Val Leu Cys Ile Ala Ser Lys Glu Glu Arg Lys Lys Ala Phe
                   230
                                        235
Gly Thr Cys Val Ser His Leu Ser Ala Val Ala Ile Phe Tyr Ile Pro
                                    250
               245
Met Ile Ser Leu Ser Leu Val His Arg Phe Gly Lys His Ala Pro Pro
                                265
Phe Val His Thr Leu Ile Ala Asn Val Tyr Leu Leu Ile Pro Pro Val
                            280
Met Asn Pro Ile Ile Tyr Ser Val Lys Thr Lys Gln Ile Arg Lys Ala
                       295
Met Leu Lys Val Phe Phe Val Lys Pro Ser
                   310
```

<211> 316

<212> PRT

<213> Mus musculus

<400> 1331

Met Leu Ile Leu Asn Asn Thr His Ser Gln Leu Pro Thr Phe Leu Leu 10 Thr Gly Ile Pro Gly Leu Arg Ala Ala Gln Val Trp Ile Ser Ile Pro 25 Phe Cys Leu Leu Tyr Val Ile Ala Leu Ser Gly Asn Ser Met Ile Leu 40 Leu Val Ile Val Arg Glu Gln Ser Leu His Glu Pro Met Tyr Tyr Phe 55 Leu Ser Met Leu Ser Ile Thr Asp Leu Ser Leu Ser Leu Cys Thr Leu 70 75 Ser Thr Thr Leu Gly Val Leu Trp Phe Glu Ala Arg Glu Ile Asn Leu 85 90 Asn Ala Cys Ile Ala Gln Met Phe Phe Leu His Gly Phe Thr Phe Met 100 105 Glu Ser Gly Val Leu Leu Ala Met Ala Phe Asp Arg Phe Val Ala Ile 120 Cys Asp Pro Leu Arg Tyr Thr Thr Ile Leu Thr Asn Ala Arg Ile Ala 135 140 Gln Ile Gly Thr Ile Val Leu Ile Arg Asn Val Ala Val Met Leu Pro 150 155 Val Val Leu Phe Val Lys Arg Leu Ser Phe Cys Ser Ser Leu Val Leu 165 170 Ser His Ser Tyr Cys Tyr His Val Asp Val Ile Gln Leu Ser Cys Thr

180 185 Asp Asn Arg Ile Asn Ser Val Leu Gly Leu Phe Ala Leu Phe Ser Thr 200 Thr Gly Phe Asp Cys Pro Cys Ile Leu Leu Ser Tyr Val Leu Ile Ile 215 Arg Ser Val Leu Ser Ile Ala Ser Ser Asp Glu Arg Gln Lys Ala Phe 230 235 Asn Thr Cys Ile Ser His Ile Ser Ala Val Ala Ile Phe Tyr Ile Pro 245 250 Leu Ile Ser Leu Ser Leu Val His Arg Tyr Gly His Ser Ala Pro Ala 265 Phe Val His Thr Val Met Ala Asn Val Phe Leu Leu Ile Pro Pro Val 275 280 Leu Asn Pro Ile Ile Tyr Ser Val Lys Thr Lys Gln Ile Arg Lys Ala 295 Ile Leu Lys Val Leu Asn Gln Lys Gln Asn Gln Leu

<210> 1332

<211> 313

<212> PRT

<213> Mus musculus

<400> 1332

Met Ser Val Ile Asn Asp Ser Ser Leu Tyr Pro Arg Phe Leu Leu Thr 1.0 Gly Phe Pro Gly Leu Glu Thr Arg Tyr Gly Leu Ile Ser Ile Pro Ile 25 Phe Leu Val Tyr Val Thr Ser Ile Ala Gly Asn Ile Thr Ile Leu Phe 40 Ile Ile Arg Thr Glu Ser Ser Leu His Gln Pro Met Tyr Tyr Phe Leu 55 Ser Met Leu Ala Leu Thr Asp Leu Gly Leu Ser Thr Thr Thr Leu Pro Thr Met Phe Ser Val Phe Trp Phe Gln Ala Arg Glu Ile Pro Phe Asn 85 90 Ala Cys Leu Val Gln Met Tyr Phe Ile His Val Phe Ser Ile Ile Glu 105 Ser Ala Val Leu Leu Ala Met Ala Phe Asp Arg Phe Val Ala Ile Arg 120 125 Glu Pro Leu Arg Tyr Ala Ala Ile Leu Thr Asn Thr Val Ile Val Gly 135 140 Ile Gly Leu Ala Ile Ala Gly Arg Ala Leu Ala Leu Val Phe Pro Ala 150 155 Ser Phe Leu Leu Lys Arg Leu Gln Tyr Arg Val Ile Asn Ile Leu Ser 170 Tyr Pro Phe Cys Leu His Gln Asp Leu Ile Lys Thr Thr Val Ser Ser 180 185 Arg Trp Val Ser Ser Ile Tyr Gly Leu Met Val Val Ile Phe Ser Met 200 Gly Leu Asp Ser Leu Leu Leu Leu Ser Tyr Ile Leu Ile Leu Gly 215 Thr Val Leu Ser Ile Ala Ser Lys Ala Glu Arg Ile Lys Ala Leu Asn 230 235 Thr Cys Ile Ser His Ile Cys Ala Val Leu Thr Phe Tyr Thr Pro Met 250

 Ile Gly Leu Ser Met 11e Arg Arg Tyr Gly Gln Asn Ala Ser Pro Ile 260
 260
 265
 270
 270
 11e
 270
 270
 11e
 270
 270
 11e
 270
 270
 11e
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 280
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285

<210> 1333 <211> 318 <212> PRT <213> Mus musculus

<400> 1333 Met Ala Asp His Asn His Ser Gln Ser Gln His Leu Tyr Phe Ile Leu Thr Gly Ile Pro Gly Leu Glu Gln Lys Tyr Tyr Trp Met Ala Phe Pro Leu Gly Ala Ile Tyr Val Ile Ala Leu Phe Gly Asn Gly Val Ile Ile 40 Ser Thr Ile Lys Ser Glu Ser Ser Leu His Ile Pro Met Tyr Tyr Phe 55 Leu Cys Met Leu Ala Phe Ala Asp Met Gly Leu Thr Leu Cys Thr Leu 75 70 Pro Ser Met Leu Gly Ile Phe Trp Phe Asn Tyr Lys Phe Ile Thr Phe 85 90 Asp Gly Cys Leu Val Gln Met Tyr Phe Ile His Thr Phe Ser Ala Ile 105 100 Glu Ser Gly Val Leu Val Ala Met Ala Ile Asp Arg Val Ile Ala Ile 120 125 Trp Ser Pro Leu Arg Tyr Gly Thr Ile Leu Thr Asn Gly Val Val Cys 135 Lys Ile Gly Met Leu Ile Leu Ser Arg Ala Val Cys Val Val Phe Pro 150 155 Val Pro Phe Leu Ile Lys Arg Leu Pro Phe Tyr Arg Ser Asn Ile Leu 165 170 Ser His Ser Phe Cys Leu His Gln Asp Val Met Arg Leu Ala Cys Ala 185 Ser Thr Arg Val Asn Ser Leu Tyr Gly Leu Ile Ala Val Ile Phe Thr 200 Lys Gly Ser Asp Ser Leu Ser Ile Leu Ile Ser Tyr Val Phe Ile Leu 215 220 Arg Thr Val Met Ala Ile Ala Ser Gly Glu Gly Arg Leu Lys Ala Leu 235 Asn Thr Cys Val Ser His Ile Cys Ala Val Leu Ile Phe Tyr Val Pro 245 250 Leu Ile Gly Val Ser Val Ile His Arg Phe Gly Lys His Leu Ser Pro 265 Leu Thr His Ala Leu Met Ala Asn Ala Tyr Leu Leu Val Pro Pro Val 280 Leu Asn Pro Ile Val Tyr Thr Val Lys Thr Lys Glu Ile Arg Lys Lys 295 300 Ile Ile Gln Ile Phe Ile Arg Thr Lys Ile Thr Thr Glu Gly 305

```
<211> 314
<212> PRT
<213> Mus musculus
<400> 1334
Met Val Ala Ser Ser Asn Ser Ser Ser His Pro Leu Phe Phe Met Leu
                                    10
Leu Gly Ile Pro Gly Leu Glu Asn Tyr Gln Phe Trp Ile Ala Phe Pro
                                25
Phe Cys Val Met Tyr Ile Val Ala Leu Thr Gly Asn Ile Thr Ile Leu
                            40
Tyr Ile Ile Arg Ile Asp His Thr Leu His Glu Pro Met Tyr Leu Phe
                        55
                                            60
Leu Ala Leu Leu Ala Ile Thr Asp Leu Val Leu Ser Ser Ser Thr Gln
                    70
Pro Lys Met Leu Ala Ile Leu Trp Phe His Ser His Glu Ile Glu Tyr
                                    90
Asn Ala Cys Leu Ile Gln Val Phe Phe Ile His Ala Phe Ser Ser Val
                                105
Glu Ser Gly Val Leu Met Thr Met Ala Leu Asp Arg Tyr Val Ala Ile
                            120
                                                125
Cys Phe Pro Leu Arg His Ser Ser Ile Leu Thr Thr Ser Val Val Ile
                        135
Lys Leu Gly Ala Ala Val Met Val Arg Gly Leu Leu Trp Val Ser Pro
                   150
                                        155
Phe Cys Phe Met Val Ser Arg Met Pro Phe Cys Pro Asn Lys Val Ile
                165
                                    170
Pro Gln Ser Tyr Cys Glu His Met Ala Val Leu Lys Leu Val Cys Ala
           180
                                185
Asp Thr Arg Val Asn Arg Gly Tyr Gly Leu Phe Val Ala Phe Ser Val
                            200
                                                205
Val Gly Phe Asp Ile Ile Val Ile Ser Val Ser Tyr Val Met Ile Leu
                        215
Arg Ala Val Leu Arg Leu Pro Ser Gly Glu Ala Arg Leu Lys Ala Phe
                    230
                                        235
Gly Thr Cys Ala Ser His Val Cys Val Ile Leu Ala Phe Tyr Ile Pro
               245
                                    250
Ala Leu Phe Thr Phe Leu Thr His Arg Phe Gly His His Val Pro Arg
           260
                                265
Val Val His Ile Met Phe Ala Asn Phe Tyr Leu Leu Val Pro Pro Met
                           280
                                                285
Leu Asn Pro Ile Ile Tyr Gly Val Arg Thr Lys Gln Ile Arg Asp Arg
                        295
                                            300
Val Ile Arg Gly Phe Arg Arg Lys Asp Pro
<210> 1335
<211> 319
<212> PRT
<213> Mus musculus
<400> 1335
Met Leu Gln Met Gln Asp Asn Thr Glu Phe Leu Ser Asn Phe Thr Ser
```

```
Lys Leu Ser Thr Phe Leu Leu Thr Gly Ile Pro Gly Leu Glu Ser Ala
                                25
His Gly Trp Ile Ser Ile Pro Phe Cys Cys Leu Tyr Ala Thr Ala Leu
Ser Gly Asn Ser Met Ile Leu Phe Ile Ile Val Thr Gln His Ser Leu
His Glu Pro Met Tyr Tyr Phe Leu Ser Val Leu Ser Ala Thr Asp Leu
                    70
                                        75
Gly Leu Thr Phe Ser Thr Met Ser Thr Thr Leu Arg Ile Leu Trp Phe
Gln Ala Asn Glu Ile Ser Leu Asp Leu Cys Ile Val Gln Met Phe Phe
                                105
Leu His Gly Phe Thr Cys Thr Glu Ser Gly Val Leu Val Ala Met Ala
       115
                           120
                                                125
Phe Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Arg Tyr Thr Met Ile
                       135
                                           140
Leu Thr Asn Ser Arg Ile Ile Gln Ile Gly Phe Leu Val Ile Met Arg
                    150
                                        155
Thr Leu Leu Leu Ile Ile Pro Leu Leu Leu Leu Lys Pro Val Ser
                                    170
Phe Cys Lys Arg Asn Thr Leu Ser His Ser Tyr Cys Tyr Tyr Pro Asp
                                185
                                                    190
Val Ile Lys Leu Ala Cys Ser Asp Thr Arg Ala Asn Asn Ile Cys Gly
                           200
Leu Val Asp Leu Ile Leu Thr Thr Gly Leu Asp Ile Pro Cys Ile Val
                      . 215
                                           220
Leu Ser Tyr Ile Leu Ile Ile Arg Ser Val Leu Asn Ile Ala Ser Ser
                   230
                                        235
Glu Glu Arg His Lys Ala Phe Ser Thr Cys Val Ser His Ile Ala Ala
                                   250
               245
Val Ala Val Phe Tyr Ile Pro Met Phe Ser Leu Ser Leu Val His Arg
                                265
Tyr Gly Arg Ser Val Pro Lys Val Val His Thr Met Met Ala Asn Val
       275
                           280
Tyr Leu Leu Pro Pro Val Leu Asn Pro Ile Ile Tyr Ser Val Lys
                        295
Thr Lys Gln Ile Arg Lys Ala Ile Leu Ser Leu Leu Phe Ala Lys
                    310
```

<211> 316

<212> PRT

<213> Mus musculus

<400> 1336

 Met
 Ser
 Thr
 Leu
 Glu
 Asn
 Thr
 Thr
 Ala
 Ser
 Ser
 Ile
 Ile
 Phe
 Leu
 Leu
 Leu
 Glu
 Ala
 Phe
 His
 Thr
 Trp
 Ile
 Ser
 Ile
 Pro

 Phe
 Cys
 Phe
 Leu
 Tyr
 Ala
 Thr
 Ala
 Leu
 Ser
 Gly
 Asn
 Ser
 Leu
 Ile
 Leu
 Ile
 Leu
 Ile
 Leu
 Ile
 Leu
 Ile
 Ile

```
85
                                    90
Asn Ala Cys Leu Ser Gln Met Phe Phe Ile Gln Leu Phe Thr Val Met
                               105
Glu Ser Ser Val Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile
                            120
Ser Asn Pro Leu Arg Tyr Ala Ser Val Leu Thr Asp Val Lys Ile Val
                        135
                                            140
Val Ile Gly Val Ala Ile Ile Thr Arg Gly Thr Leu Ile Gln Thr Pro
                   150
                                        155
Leu Ala Val Leu Leu Lys Arg Leu Ser Phe Cys Ser Ser His Val Leu
                                    170
               165
His His Ser Tyr Cys Phe His Pro Asp Ile Met Lys Leu Ser Cys Thr
           180
                                185
Asp Thr Arg Ile Asn Ser Ala Val Gly Leu Thr Ala Leu Ile Ser Thr
       195
                            200
                                                205
Ala Gly Val Asp Ser Val Phe Ile Ile Leu Ser Tyr Val Leu Ile Ile
                        215
Arg Thr Val Leu Ser Ile Ala Ser Pro Glu Glu Arg Lys Lys Ala Phe
                    230
                                        235
Ser Thr Cys Ile Ser His Ile Gly Ala Val Ala Val Phe Tyr Ile Pro
                                    250
                245
Leu Ile Ser Leu Ser Phe Val His Arg Phe Gly Lys Arg Ala Pro Pro
            260
                                265
Tyr Val His Thr Leu Ile Ala Asn Ala Tyr Leu Leu Ile Pro Pro Val
                            280
                                                285
Met Asn Pro Ile Ile Tyr Ser Val Lys Thr Lys Gln Ile Arg Lys Ala
                        295
Val Leu Lys Val Leu His Ser Ser Met Thr Lys Ser
                    310
```

<211> 322

<212> PRT

<213> Mus musculus

<400> 1337

Met Ser Pro Leu Ser Ala Gln Asp Thr Ser Asn Ile Ser Ser Leu Met 10 Ala Pro Thr Phe Leu Leu Val Gly Leu Pro Gly Leu Glu Ala Ala Pro Ser Trp Trp Ser Val Pro Leu Ile Thr Ile Tyr Leu Phe Ser Ala Phe 40 Gly Asn Gly Thr Ile Leu Trp Ile Ile Ala Leu Glu Pro Thr Leu His Arg Pro Met Tyr Phe Phe Leu Phe Leu Ser Val Ser Asp Val Gly 75 70 Leu Ala Thr Val Leu Met Pro Thr Leu Leu Gly Leu Ala Phe Ala Asp 90 85 Ala His Thr Val Pro Ala Ser Ala Cys Leu Leu Gln Met Phe Phe Ile 105 His Val Phe Ser Val Met Glu Ser Ser Val Leu Leu Ala Met Ala Phe 120 125 Asp Arg Ala Val Ala Ile Cys Arg Pro Leu His Tyr Pro Val Leu Leu 135 140 Thr Asn Gly Val Ile Arg Lys Ile Ala Val Ala Ile Ala Phe Arg Cys 150 155

Leu Ser Leu His Leu Pro Leu Pro Ile Leu Leu Ala Arg Met Pro Tyr 165 170 Cys Arg Pro Gln Val Leu Thr His Ser Tyr Cys Leu His Pro Asp Met 180 185 Ala Arg Leu Ala Cys Pro Glu Ala Trp Gly Ala Val Tyr Ser Leu Val Val Val Leu Ser Ala Met Ala Leu Asp Pro Leu Leu Ile Phe Phe Ser 215 220 Tyr Gly Leu Ile Gly Arg Ala Leu Gln Gly Val Gly Ser Ala Glu Asp 230 235 Arg Trp Lys Ala Gly Gln Thr Cys Ala Ala His Leu Ser Ala Val Leu 245 250 Leu Phe Tyr Ile Pro Met Ile Leu Leu Ala Leu Ile Asp Arg Phe Lys 260 265 270 Leu Pro Leu Pro Pro Pro Ala His Thr Leu Leu Ser Tyr Val His Phe 280 Leu Leu Pro Pro Leu Met Asn Pro Val Leu Tyr Ser Val Lys Met Lys 295 300 Glu Ile Arg Glu Lys Ile Leu Lys Arg Leu Leu Pro Thr Lys Val Gly 305 310 Cys Ala

<210> 1338 <211> 316 <212> PRT <213> Mus musculus

<400> 1338

Met Gly Ala Glu Asn Asn Glu Ser Leu Asp Leu Ser Ile Phe Leu Thr Gly Ile Pro Gly Leu Glu Ala Gln His Gly Trp Leu Ser Ile Pro Phe Phe Ile Met Tyr Ile Val Ala Ile Val Gly Asn Ser Leu Ile Met 40 Ile Ala Val Gln Glu Ser Ala Leu His Glu Pro Met Tyr Leu Phe 55 Leu Ser Met Leu Ala Ile Thr Glu Val Gly Val Ser Val Ser Thr Leu 70 75 Pro Thr Val Met Gly Ile Leu Trp Phe Asn Ala Tyr Arg Ile Asp Phe 90 Asp Gly Cys Leu Ala Gln Met Phe Phe Ile His Thr Phe Ser Gly Met 105 100 110 Glu Ser Gly Val Leu Leu Ala Met Ser Tyr Asp Arg Phe Val Ala Ile 120 Tyr Asn Pro Leu Arg Tyr Thr Ala Ile Leu Thr Leu Pro Arg Ile Ile 135 140 Ser Met Gly Leu Gly Ile Thr Leu Lys Ser Val Ala Leu Met Ala Pro 150 155 Leu Pro Ile Leu Leu Lys Gln Leu Pro Tyr Cys His Ile Asn Ile Leu 165 170 Ser His Ser Tyr Cys Leu His Ser Asp Leu Ile Gln Leu Pro Cys Ala 180 185 190 Asp Thr Arg Leu Asn Ser Ile Leu Gly Leu Ala Ile Val Leu Ala Thr 200 205 Phe Gly Leu Asp Ser Leu Leu Ile Val Val Ser Tyr Gly Leu Ile Leu

```
210
                       215
                                            220
Tyr Thr Val Met Gly Ile Ala Ser Gly Glu Gly Arg Lys Lys Thr Leu
                   230
                                       235
Asn Thr Cys Val Ser His Ile Cys Ala Val Leu Ile Tyr Tyr Val Pro
                                    250
                245
Met Ile Gly Val Ser Val Met His Arg Val Ala Lys His Ala Ser Pro
            260
                                265
Val Val His Thr Leu Met Ser Ser Ile Tyr Leu Phe Val Pro Pro Val
                           280
Leu Asn Pro Ile Ile Tyr Ser Val Lys Thr Arg Pro Ile Gln Gln Gly
                       295
Ile Ala Asn Leu Phe Ser Cys Lys Lys Gly Ser Ile
                    310
<210> 1339
<211> 317
<212> PRT
<213> Mus musculus
<400> 1339
Met Val Gly Asn Ile Thr His Gln Gln Ile Ala Ser Phe Phe Leu Val
Gly Ile Pro Gly Leu Glu Asn Val His Cys Trp Ile Gly Ile Ser Val
                                25
Cys Leu Leu Phe Val Leu Thr Leu Leu Gly Asn Ser Ile Val Ile Ala
                            40
Thr Ile Lys Leu Glu Pro Ser Leu His Gln Pro Met Tyr Phe Phe Leu
                        5.5
Cys Met Leu Ala Met Asn Asp Met Cys Leu Ser Ser Ser Ala Ala Leu
                    70
                                        75
Lys Met Leu Gly Ile Phe Trp Phe Asp Ala His Trp Ile Asn Phe Asp
                85
                                    90
Ala Cys Leu Thr Gln Met Tyr Phe Ile His Thr Leu Cys Ile Met Glu
                                105
Ser Ala Ile Leu Val Ala Met Ala Phe Asp Arg Phe Val Ala Ile Cys
                            120
                                                125
Ile Pro Leu His Tyr Ala Ser Ile Leu Thr Thr Ser Met Val Ile Lys
                       135
                                            140
Leu Gly Leu Val Gly Leu Met Arg Cys Val Leu Met Val Leu Pro Cys
                   150
                                        155
Pro Ile Leu Ile Lys Arg Leu Pro Tyr Tyr Thr Lys Tyr Val Ile Pro
                165
                                    170
His Thr Tyr Cys Glu His Met Ala Val Val Lys Leu Ala Ser Ala Asn
           180
                               185
Thr Leu Ile Asn Arg Ala Tyr Gly Ile Ser Val Ala Leu Ser Val Ile
                            200
Thr Val Asp Leu Gly Leu Ile Ala Thr Ser Tyr Val Lys Ile Leu Gln
                        215
Ser Val Phe Arg Leu Ser Ser Gln Asn Ala Arg Ser Lys Ala Leu Gly
                   230
                                        235
Thr Cys Ala Ala His Val Cys Thr Ile Leu Val Ser Tyr Ile Pro Ala
                                    250
Leu Phe Ser Phe Leu Ser His Arg Ile Gly Lys Lys Val Pro Pro Ser
            260
                                265
```

Val His Ile Ile Phe Ala Ser Met Tyr Leu Leu Val Pro Ser Ala Val 275 280 285 Asn Pro Val Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Asp Arg Val 295 Ile Asp Leu Phe Phe Thr His Lys Lys Phe Ser Glu Lys 310 <210> 1340 <211> 319 <212> PRT <213> Mus musculus <400> 1340 Met Ser Tyr Ser Asn His Ser Ser Thr Ser Phe Phe Leu Thr Gly Leu 10 Pro Gly Leu Glu Thr Val Tyr Leu Trp Leu Ser Ile Pro Leu Cys Thr 20 25 Met Tyr Ile Ala Ser Leu Ala Gly Asn Gly Leu Ile Leu Trp Val Val 40 Lys Ser Glu Pro Ser Leu His Gln Pro Met Tyr Tyr Phe Leu Ser Met 55 Leu Ala Val Thr Asp Leu Gly Leu Ser Val Ser Thr Leu Pro Thr Met 75 Leu Thr Ile Tyr Met Met Gly Val Ser Glu Val Ala Leu Asp Met Cys 85 90 Leu Ala Gln Leu Phe Phe Ile His Thr Phe Ser Ile Met Glu Ser Ser 100 105 110 Val Leu Leu Thr Met Ala Phe Asp Arg Val Val Ala Ile Ser Ser Pro 120 Leu His Tyr Ala Thr Ile Leu Thr Asn Pro Arg Val Ala Ser Leu Gly 135 140 Met Val Ile Leu Val Arg Ser Ile Gly Leu His Ile Pro Ala Pro Ile 150 155 Met Leu Lys Lys Leu Pro Tyr Cys Gln Lys Arg His Leu Ser His Ser

165 170 Tyr Cys Leu His Pro Asp Val Met Lys Leu Ala Cys Thr Asp Thr Arg 185 190 Ile Asn Ser Ala Tyr Gly Leu Phe Val Val Leu Ser Thr Leu Gly Val 200 205 Asp Ser Val Leu Ile Val Leu Ser Tyr Gly Leu Ile Leu Tyr Thr Val 215 220 Leu Ser Ile Ala Ser Lys Thr Glu Arg Leu Lys Ala Leu Asn Thr Cys 230 235 Val Ser His Ile Cys Ser Val Leu Leu Phe Tyr Thr Pro Met Ile Gly 245 250 Leu Ser Met Ile His Arg Phe Gly Lys Trp Ala Ser Pro Cys Ser Arg 265 Val Leu Leu Ser Tyr Leu His Phe Leu Thr Pro Pro Val Leu Asn Pro 280 Val Val Tyr Thr Ile Lys Thr Lys Gln Ile Arg Gln Arg Ile Trp Cys 295 Ile Phe Arg Cys Gly Gly Arg Ser Ile Gly His Ile Gln Gly His 310

<210> 1341 <211> 315

<212> PRT

```
<400> 1341
Met Ala Ile Ser Lys His Ser Asn Ala Ser Ser Phe Phe Ile Leu
-Met Asp Leu Pro Gly Leu Glu Thr Ser His Cys Trp Thr Ala Ile Pro
                                25
Ile Cys Leu Ile Tyr Val Leu Ser Val Leu Gly Asn Ile Thr Ile Met
                            40
His Ile Val Lys Ser Val Pro Ser Leu His Thr Pro Met Tyr Leu Phe
                        55
Leu Ser Met Leu Ser Met Ala Asp Leu Gly Leu Ser Ala Ser Thr Leu
Pro Ser Met Val Ala Val Phe Leu Leu Gly Gln Arg Met Ile Gly Ala
               85
                                    90
Val Ala Cys Phe Met Gln Leu Phe Phe Ile His Thr Phe Ser Val Ile
                               105
Glu Ser Ala Val Leu Leu Ala Met Ala Phe Asp Arg Cys Val Ala Ile
                            120
Arg Glu Pro Leu Arg Tyr Ala Thr Ile Leu Thr Thr Arg Arg Ile Gly
                        135
Ala Ile Gly Leu Ala Val Val Ile Arg Ser Ala Ala Leu His Leu Pro
                    150
                                       155
Leu Pro Val Leu Leu Gly Arg Leu Thr Phe Gln Pro Val Ser Ala Leu
                165
                                   170
Ser His Ser Tyr Cys Val His Pro Asp Val Leu Arg Leu Ser Cys Ser
                                185
Ser Thr Leu Val Asn Ser Gly Phe Gly Leu Phe Val Met Leu Ser Thr
                            200
                                                205
Leu Gly Met Asp Ala Val Leu Ile Leu Leu Ser Tyr Val Leu Ile Leu
                        215
                                            220
Lys Thr Val Leu Ser Ile Ala Ser Asn Ala Glu Arg Leu Lys Ala Phe
                    230
                                        235
Asn Thr Cys Ile Ser His Ile Cys Ala Val Leu Leu Phe Tyr Thr Pro
                                    250
Leu Val Ser Leu Ser Met Ile His Arg Phe Gly Lys Lys Leu Pro
                                265
                                                    270
Ala Gln Val Tyr Met Leu Leu Ser Tyr Leu His Phe Leu Met Pro Pro
                            280
Met Leu Asn Pro Ile Val Tyr Ser Val Lys Thr Lys Glu Ile Arg Val
                       295
Arg Ile Leu Lys Met Leu His Pro Lys Lys His
305
                    310
<210> 1342
<211> 313
<212> PRT
<213> Mus musculus
<400> 1342
Met Ser Glu Phe Asn Thr Thr Phe Gln Pro Ser Val Phe Ile Leu Thr
Gly Leu Arg Gly Leu Val Gly Ala Arg Leu Trp Leu Gly Pro Leu Leu
                                25
Ser Leu Met Tyr Ile Thr Thr Leu Ala Gly Asn Cys Thr Val Ile Tyr
```

```
Leu Val Arg Thr Glu Arg Ser Leu Gln Glu Pro Gln Tyr Gln Phe Leu
                        55
Ser Met Leu Ala Gly Ala Asp Ile Val Leu Ser Val Ser Thr Leu Phe
                                        75
                    70
Ser Val Leu Lys Val Phe Ile Phe Asp Leu Tyr Glu Ile Ala Phe Asp
                                    90
Ser Cys Leu Ala Gln Leu Phe Phe Ile His Thr Ser Ser Ser Met Gly
                                105
           100
Ser Gly Ile Leu Leu Ala Met Ala Phe Asp Arg Phe Val Ala Ile Ser
                           120
His Pro Leu Gln Tyr Thr Thr Ile Leu Thr Asn Ser Arg Val Thr Arg
                        135
                                            140
Met Gly Leu Ala Ala Phe Leu Arg Gly Val Ala Leu Met Met Pro Leu
                   150.
                                        155
Pro Ile Leu Leu Lys Arg Leu Pro Phe Cys Lys Gly Gln Leu Leu Ser
                                   170
Tyr Ser Tyr Cys Ile His Pro Asn Val Met Lys Leu Ala Cys Gly Gln
            180
                                185
Val Lys Ile Asn Ile Phe Tyr Gly Leu Val Leu Val Ile Phe Ser Phe
        195
                            200
Gly Val Asp Phe Leu Leu Ile Ala Ile Ser Tyr Ala Leu Ile Phe Gln
                       215
                                            220
Ala Val Met Gly Ile Ala Ser Arg Glu Gly Gln Met Lys Ala Leu Asn
                   230
                                        235
Thr Cys Leu Ser His Ile Phe Ile Val Phe Ile Tyr Tyr Gly Pro Leu
               245
                                    250
Leu Ala Ile Thr Val Met His Arg Ile Ser Arg Arg Ser Ser Pro Ile
           260
                                265
Ala His Ala Val Leu Gly Asn Ile Tyr Leu Phe Met Pro Pro Met Leu
                           280
                                                285
Asn Pro Ile Val Tyr Ser Leu Lys Thr Lys Gln Ile Arg Ser Ala Leu
                        295
Arg Lys Ser Leu Lys Ile Gln Arg Arg
305
                    310
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1343

 Met
 Thr
 Leu
 Asn
 Tyr
 Thr
 Val
 Val
 Ser
 His
 Thr
 Val
 Phe
 Thr
 Ile
 Pro
 Pro
 Ile
 Pro
 Ile
 Pro
 Ile
 Pro
 Ile
 I

```
115
                           120
                                              125
Cys Tyr Pro Leu Arg Tyr Thr Thr Val Leu Thr Asn Ser Leu Ile Gly
                      135
Lys Ile Gly Val Gly Ile Phe Leu Arg Ser Tyr Gly Thr Ile Phe Pro
                   150
                                       155
Ile Ile Phe Leu Leu Lys Arg Leu Thr Phe Cys Lys Asn Asn Ile Ile
               165
                                   170
Pro His Thr Tyr Cys Glu His Ile Gly Leu Ala Lys Tyr Ala Cys Asn
                               185
Ser Ile Arg Val Asn Ile Trp Tyr Gly Phe Ser Val Leu Ile Leu Thr
                           200
                                               205
Val Val Leu Asp Val Val Leu Ile Phe Val Ser Tyr Val Leu Ile Leu
                       215
Arg Ala Val Phe Arg Met Pro Ser Gln Asp Ala Arg His Lys Ala Leu
                  230
                                       235
Asn Thr Cys Gly Ser His Val Cys Ile Ile Ile Leu Phe Tyr Gly Pro
                                   250
Gly Ile Phe Thr Thr Leu Thr Gln Arg Phe Gly Arg His Ile Pro Pro
           260
                                265
His Ile His Ile Leu Leu Ala Asn Val Cys Ile Leu Ala Pro Pro Met
                            280
                                               285 -
Leu Asn Pro Ile Ile Tyr Gly Ile Lys Thr Lys Gln Ile Gln Glu Gln
                       295
Met Val His Val Leu Phe Thr Asn His Lys
                   310
```

<211> 318

<212> PRT

<213> Mus musculus

<400> 1344

Met Ala Thr Gly Asn Leu Thr His Val Thr Glu Phe Ile Leu Met Gly Val Thr Asp Arg Pro Glu Leu Gln Val Pro Leu Phe Phe Leu Phe Leu 25 Val Ile Tyr Leu Leu Thr Ala Ala Gly Asn Leu Gly Ile Ile Thr Leu 40 Thr Ser Val Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg 55 60 His Leu Ala Val Ile Asn Phe Gly Asn Ser Thr Val Ile Ala Pro Lys 70 75 Met Leu Val Asn Phe Leu Val Ser Lys Lys Thr Thr Leu Tyr Tyr Glu 85 90 Cys Ala Thr Gln Leu Gly Gly Phe Leu Val Phe Met Val Ser Glu Ile 105 Phe Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Leu Tyr Met Val Val Val Ser Arg Arg Val Cys Leu Leu Leu 135 140 Val Phe Leu Thr Tyr Leu Phe Ser Phe Val Thr Ala Ile Val Val Thr 150 155 Pro Cys Val Phe Ser Val Ser Tyr Cys Ser Ser Asn Val Ile Asn His · 165 170 Phe Tyr Cys Asp Asn Val Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr 185

```
His Leu Pro Glu Thr Val Val Phe Phe Phe Ser Ala Thr Asn Leu Phe
       195
                            200
                                                205
Phe Ser Met Ile Ile Val Leu Ile Ser Tyr Phe Asn Ile Val Leu Ala
                        215
Ile Leu Arg Ile Arg Ser Ser Glu Gly Arg Lys Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Met Met Ala Val Thr Val Phe Tyr Gly Thr Leu Leu
                                    250
                245
Phe Met Tyr Leu Gln Pro Arg Thr Asn His Ser Leu Asp Thr Asp Lys
                                265
Ile Ala Ser Val Phe Tyr Thr Leu Ile Ile Pro Met Leu Asn Pro Val
       275
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Cys Ala Leu Lys Glu Phe
                       295
Leu Lys Asn Pro Met Gln Lys Ile Gln Ser Tyr Met Asn Leu
                    310
                                        315
```

<210> 1345 <211> 314

<212> PRT

<213> Mus musculus

<400> 1345

Met Gly Gly Glu Ala His Asn Ser Ser Gly Leu Pro Pro Phe Ile Leu 10 Thr Gly Leu Pro Gly Met Glu Thr Ser Gln His Trp Leu Phe Leu Leu 25 Leu Gly Val Leu Tyr Thr Val Ser Ile Val Gly Asn Ala Leu Ile Leu 40 4.5 Phe Ile Ile Lys Glu Glu Glu Ser Leu His Gln Pro Met Tyr Tyr Phe Leu Ser Leu Ser Leu Asn Asp Leu Gly Val Ser Phe Ser Thr Leu 75 Thr Thr Val Leu Gly Val Phe Cys Phe Leu Leu Arg Glu Ile Ser Phe 85 Asn Ser Cys Met Ser Gln Met Phe Phe Ile His Leu Phe Ser Phe Met 100 105 Glu Ser Gly Ile Leu Leu Ala Met Ser Phe Asp Arg Tyr Val Ala Ile 120 Cys Asn Pro Leu His Tyr Ser Thr Val Leu Thr Asp Ala Arg Val Met 135 140 Trp Met Gly Val Cys Val Phe Phe Arg Ser Phe Cys Met Ile Phe Pro 150 155 Leu Pro Phe Leu Leu Lys Arg Leu Pro Phe Cys Lys Ala Asn Val Leu 170 Ser His Ala Tyr Cys Leu His Pro Asp Met Ile Arg Leu Pro Cys Gly 180 185 Asp Ile Thr Ile Asn Asn Ile Phe Gly Leu Phe Ile Val Ile Ser Thr 200 Phe Gly Leu Asp Ser Ala Leu Ile Leu Leu Ser Tyr Val Leu Ile Leu 215 220 Arg Ser Val Leu Ala Ile Ala Ser Arg Glu Glu Arg Leu Lys Thr Leu 230 235 Asn Thr Cys Val Ser His Leu Cys Ala Val Leu Ile Phe Tyr Val Pro 245 250 Met Val Gly Val Ser Met Ala Ala Arg Tyr Gly Arg His Ala Pro Arg

Tyr Val His Thr Leu Leu Ser Leu Val Tyr Leu Phe Val Pro Pro Met 275

Leu Asn Pro Val Ile Tyr Ser Ile Lys Thr Lys Glu Ile Arg Arg Arg 290

Leu His Lys Ile Leu Leu Gly Thr Lys Ile 305

<210> 1346 <211> 320 <212> PRT <213> Mus musculus

<400> 1346

Met Thr Ser Ser Thr Tyr Leu Asn His Thr Asn Leu Arq Asp Ile Trp Tyr Thr Met Ile Gly Ile Pro Gly Leu Glu Asp Ala His Ile Trp Leu Ser Ile Pro Ile Phe Ser Met Tyr Ile Val Ala Val Ile Gly Asn Thr Phe Leu Ile Leu Leu Ile Ser Ile Glu His Ser Leu His Glu Pro Met 55 Tyr Phe Phe Leu Thr Met Leu Ala Leu Ala Asp Ile Phe Leu Ser Thr 75 Val Thr Ile Pro Lys Val Leu Ala Ile Phe Trp Phe Gln Asp Arg Ser 90 Ile Ser Phe Ala Ser Cys Val Ser Gln Met Phe Phe Leu His Phe Ile 105 100 Phe Val Thr Glu Ser Gly Ile Leu Leu Ser Met Ala Phe Asp Arg Tyr 120 Val Ala Ile Cys Tyr Pro Leu Arg Tyr Thr Thr Ile Leu Thr Pro Ser 135 140 Val Ile Ile Lys Met Gly Ile Ala Ala Val Thr Arg Ser Phe Phe Ile 150 155 Cys Phe Pro Leu Ile Phe Leu Val Tyr Arg Leu Thr Tyr Cys Gly Lys 165 170 Ser Ile Ile Arg His Ser Tyr Cys Glu His Met Gly Ile Ala Arg Leu 185 Ala Cys Asp Ser Ile Lys Val Asn Ile Tyr Tyr Gly Leu Ile Val Ala 200 205 Leu Phe Ser Ile Phe Leu Asp Val Val Leu Ile Ile Val Ser Tyr Ala 215 220 Arg Ile Leu Cys Ala Val Tyr Arg Ile Pro Ser Gln Asp Ala Arg Leu 230 235 Lys Ala Leu Ser Thr Cys Gly Ser His Val Cys Val Ile Leu Leu Phe Tyr Met Pro Val Phe Phe Ser Ser Leu Ala His Arg Phe Gly Gly Asp , 260 265 Ser Ile Pro Leu His Val His Ile Leu Leu Ala Asn Leu Tyr Val Val 280 Leu Pro Pro Ser Leu Asn Pro Ile Ile Tyr Gly Val Lys Thr Lys Gln 295 Ile Gln Glu Arg Val Val Gln Leu Phe Ser Leu Asn Lys Val Ile Cys 310 315

```
<211> 320
<212> PRT
<213> Mus musculus
<400> 1347
Met Ser Ser Cys Asn Phe Thr His Ala Thr Phe Leu Leu Ile Gly Ile
               5
                                   10
Pro Gly Leu Glu Glu Ala His Phe Trp Phe Gly Phe Pro Leu Leu Ser
                               25
Met Tyr Ala Val Ala Leu Phe Gly Asn Cys Ile Val Val Phe Ile Val
                           40
Arg Thr Glu Arg Ser Leu His Ala Pro Met Tyr Leu Phe Leu Cys Met
                       55
Leu Ala Ala Ile Asp Leu Ala Leu Ser Thr Ser Thr Met Pro Lys Ile
                   70
                                       75
Leu Ala Leu Phe Trp Phe Asp Ser Arg Glu Ile Thr Phe Asp Ala Cys
                                   90
               85
Leu Ala Gln Met Phe Phe Ile His Thr Leu Ser Ala Ile Glu Ser Thr
           100
                               105
Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys His Pro
       115
                           120
                                               125
Leu Arg His Ala Ala Val Leu Asn Asn Thr Val Thr Val Gln Ile Gly
                       135
                                           140
Met Val Ala Leu Val Arg Gly Ser Leu Phe Phe Phe Pro Leu Pro Leu
                                       155
                   150
Leu Ile Lys Arg Leu Ala Phe Cys His Ser Asn Val Leu Ser His Ser
                               170
               165
Tyr Cys Val His Gln Asp Val Met Lys Leu Ala Tyr Thr Asp Thr Leu
                               185
          180
                                                  190
Pro Asn Val Val Tyr Gly Leu Thr Ala Ile Leu Leu Val Met Gly Val
                           200
Asp Val Met Phe Ile Ser Leu Ser Tyr Phe Leu Ile Ile Arg Thr Val
   210
                       215
Leu Gln Leu Pro Ser Lys Ser Glu Arg Ala Lys Ala Phe Gly Thr Cys
                   230
                                       235
Val Ser His Ile Ser Val Val Leu Ala Phe Tyr Val Pro Leu Ile Gly
               245
                                   250
Leu Ser Val Val His Arg Phe Gly Asn Ser Leu Asp Pro Ile Val His
           260
                               265
Val Leu Met Gly Asp Val Tyr Leu Leu Pro Pro Val Ile Asn Pro
                           280
Ile Ile Tyr Gly Ala Lys Thr Lys Gln Ile Arg Thr Arg Val Leu Ala
                       295
                                           300
Met Phe Lys Ile Ser Cys Asp Lys Asp Ile Glu Ala Gly Gly Asn Thr
                   310
<210> 1348
<211> 329
<212> PRT
<213> Mus musculus
```

Met Ser Asn Thr Ile Ser Gln Thr Met Glu Ser Pro Asn His Thr Asp

Leu Asp Pro Ser Ile Phe Phe Leu Leu Gly Ile Pro Gly Leu Glu Gln

10

<210> 1347

<400> 1348

```
25
            20
Phe His Met Trp Leu Ser Leu Pro Val Cys Cys Leu Gly Thr Ala Thr
Ile Val Gly Asn Ile Thr Ile Leu Val Val Val Ala Thr Glu Pro Thr
                        5.5
Leu His Arg Pro Val Tyr Leu Phe Leu Cys Met Leu Ser Thr Ile Asp
                    70
Leu Ala Ala Ser Phe Ser Thr Val Pro Lys Leu Leu Ala Ile Leu Trp
                                    90
Cys Gly Ala Gly His Ile Ser Ala Ser Ala Cys Leu Thr Gln Met Phe
                               105
Phe Ile His Ala Phe Cys Met Met Glu Ser Thr Val Leu Leu Ala Met
                           120
Ala Phe Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Ser Thr
                       135
                                           140
Ile Leu Thr Asp Thr Ile Ile Ala Arg Ile Gly Val Val Ala Met Met
                   150
                                        155
Arg Gly Ser Leu Leu Met Leu Pro Cys Pro Phe Leu Ile Gly Arg Leu
                165
                                    170
Ser Phe Cys Gln Ser His Val Ile Pro His Thr Tyr Cys Glu His Met
                                185
            180
Ala Val Val Lys Leu Ala Cys Gly Asp Thr Arg Pro Asn Arg Val Tyr
                           200
Gly Leu Thr Ala Ala Leu Leu Val Ile Gly Val Asp Leu Phe Cys Ile
                        215
                                            220
Gly Leu Ser Tyr Ala Leu Ile Ala Gln Ala Val Phe Arg Leu Ser Ser
                   230
                                        235
Gln Glu Ala Arg Ser Lys Ala Leu Gly Thr Cys Gly Ser His Val Cys
                                    250
                245
Val Ile Leu Ile Ser Tyr Thr Pro Ala Leu Phe Ser Phe Phe Thr His
                                265
Arg Phe Gly His His Val Pro Leu His Ile His Ile Leu Leu Ala Asn
                            280
Val Tyr Leu Leu Phe Pro Pro Ala Leu Asn Pro Val Val Tyr Gly Val
                        295
Lys Thr Arg Glu Ile Arg Glu Arg Val Ala Lys Val Phe Gln Trp Gly
                   310
                                        315
Gln Gly Thr Arg Leu Lys Ile Ser Lys
                325
```

<211> 317

<212> PRT

<213> Mus musculus

<400> 1349

 Met
 Met
 Leu
 Ser
 Ala
 Ala
 Ile
 Pro
 Asn
 Gly
 Thr
 Ala
 Phe
 His
 Pro
 Pro
 Pro
 10
 Thr
 Ala
 Phe
 His
 Pro
 Pro
 Pro
 10
 Thr
 Asp
 Gln
 His
 Val
 Trp

 Thr
 Phe
 Pro
 Phe
 Cys
 Ser
 Met
 Tyr
 Ile
 Leu
 Ala
 Leu
 Val
 Gly
 Asp

 Gly
 Thr
 Ile
 Leu
 Tyr
 Ile
 Ile
 Thr
 Asp
 Ala
 Leu
 His
 Gly
 Asp

 Gly
 Thr
 Ile
 Leu
 Tyr
 Ile
 Ile
 Thr
 Asp
 Arg
 Ala
 Leu
 His
 Gly
 Pro

 50
 Tyr
 Leu
 Phe
 Leu
 Leu
 Leu
 Ser
 Ile
 Thr
 Asp
 Leu
 Val
 Leu
 Cys

 65

```
Ser Thr Thr Leu Pro Lys Met Leu Ala Ile Phe Trp Leu Arg Ser His
                                    90
Val Ile Ser Tyr His Gly Cys Leu Thr Gln Met Phe Phe Val His Ala
                                105
Val Phe Ala Thr Glu Ser Ala Val Leu Leu Ala Met Ala Phe Asp Arg
Tyr Val Ala Ile Cys Arg Pro Leu His Tyr Thr Ser Ile Leu Asn Ala
                       135
                                            140
Val Val Ile Gly Lys Ile Gly Leu Ala Cys Val Thr Arg Gly Leu Leu
                   150
                                       155
Phe Val Phe Pro Phe Val Ile Leu Ile Glu Arg Leu Pro Phe Cys Gly
               165
                                   170
His His Ile Ile Pro His Thr Tyr Cys Glu His Met Gly Ile Ala Lys
           180
                               185
Leu Ala Cys Ala Ser Ile Lys Pro Asn Thr Ile Tyr Gly Leu Thr Val
       195
                           200
                                               205
Ala Leu Ser Val Thr Gly Met Asp Val Val Leu Ile Ala Thr Ser Tyr
                        215
                                            220
Ile Leu Ile Leu Gln Ala Val Leu Arg Leu Pro Ser Lys Asp Ala Gln
                    230
Phe Arg Ala Phe Ser Thr Cys Gly Ala His Ile Cys Val Ile Leu Val
               245
                                    250
Phe Tyr Ile Pro Ala Phe Phe Ser Phe Phe Thr His Arg Phe Gly His
                               265
His Val Pro Pro Gln Val His Ile Ile Leu Ala Asn Leu Tyr Leu Leu
                           280
                                                285
Val Pro Pro Val Leu Asn Pro Leu Val Tyr Gly Ile Asn Thr Lys Gln
                       295
Ile Arg Leu Arg Ile Leu Asp Phe Phe Val Lys Arg Arg
                   310
```

<211> 318

<212> PRT

<213> Mus musculus

<400> 1350

Met Ile Ser Ser Lys Ala Phe Val Asn Ile Thr Phe Phe Gln Pro Gln 10 Ser Phe Leu Met Thr Gly Ile Pro Gly Leu Glu Phe Ala His Gly Trp Ile Ser Ile Pro Phe Ser Ser Met Tyr Thr Val Ala Leu Thr Gly Asn 40 Cys Leu Ile Leu Leu Ala Val Arg Arg Thr His Ser Leu His Gln Pro 55 Met Tyr Tyr Phe Leu Ser Met Leu Ala Leu Ser Asp Val Gly Leu Ser 70 75 Leu Ser Thr Leu Pro Ser Thr Leu Ala Val Leu Trp Phe Asp Tyr Arg 90 Phe Ile Asp Phe Asn Ala Cys Leu Ile Gln Met Phe Phe Leu His Phe 100 105 Phe Ser Val Val Glu Ser Ser Val Leu Leu Ala Met Ser Phe Asp Arg 120 125 Phe Val Ala Ile Ser Asn Pro Leu Arg Tyr Ala Ser Val Leu Thr Asn 135 Asn Val Ile Ile Arg Ile Gly Val Ala Ile Thr Thr Arg Ala Thr Leu

```
145
                  150
                                      155
Ser Leu Leu Pro Leu Pro Phe Leu Leu Lys Arg Leu Asn Tyr Cys Pro
           ·165
                                  170
Gly Lys Ile Leu Leu Ser His Ser Phe Cys Phe His Ala Asp Val Met
                               185
Lys Leu Ala Cys Ala Asp Ile Thr Val Asn Ile Leu Tyr Gly Leu Tyr
                           200
Val Val Leu Ser Thr Val Gly Ile Asp Ser Leu Leu Ile Val Met Ser
                       215
Tyr Ser Leu Ile Leu His Thr Val Met Gly Leu Ala Ser Pro Arg Glu
                  230
                                       235
Arg Val Arg Thr Leu Asn Thr Cys Val Ser His Ile Leu Ala Val Leu
               245
                                   250
Val Phe Tyr Ile Pro Val Ile Gly Val Ser Met Ile His Arg Phe Gly
                               265
Lys His Leu Pro His Ile Val His Ala Leu Val Ala Tyr Val Tyr Leu
                          280
       275
                                              285
Val Val Pro Pro Val Leu Asn Pro Ile Ile Tyr Ser Val Lys Ser Lys
                       295
Pro Ile Arg Gly Ala Met Phe Arg Val Leu Ser Arg Lys Gly
                   310
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1351

Met Ala Leu Phe Asn Val Thr His Pro Ala Ser Phe Leu Leu Thr Gly 10 Ile Pro Gly Leu Glu Ser Leu His Pro Trp Leu Ala Gly Pro Leu Cys 25 Val Met Tyr Ala Val Ala Leu Gly Ala Asn Thr Val Ile Leu Gln Ala 40 Val Arg Val Glu Pro Ile Leu His Ala Pro Met Tyr Tyr Phe Leu Ser Met Leu Ser Phe Ser Asp Val Ala Met Ser Met Ala Thr Leu Pro Thr 70 7.5 Val Leu Arg Thr Phe Cys Phe Asp Ala Arg Ser Ile Ala Phe Asp Ala 85 Cys Leu Val Gln Met Phe Leu Ile His Ser Phe Ser Met Met Glu Ser 100 105 Gly Ile Leu Leu Ala Met Ser Phe Asp Arg Tyr Val Ala Ile Cys Asn 120 115 125 Pro Leu His Tyr Ala Thr Val Leu Thr Asn Glu Phe Ile Ala Gly Met 135 Gly Leu Ala Val Thr Ala Arg Ser Phe Ile Thr Leu Phe Pro Leu Pro 150 155 Phe Leu Ile Lys Arg Leu Pro Ile Cys Lys Ser Asn Val Leu Ser His 165 170 Ser Tyr Cys Leu His Pro Asp Met Met Lys Leu Ala Cys Ala Asp Ile 180 185 Thr Ile Asn Ser Ile Tyr Gly Leu Phe Val Leu Val Ser Thr Phe Gly 200 205 Met Asp Leu Leu Phe Ile Phe Leu Ser Tyr Val Leu Ile Leu Arg Ser

220

```
Val Met Ala Ile Ala Ser His Glu Glu Arg Leu Lys Ala Leu Asn Thr
                                      235
                  230
Cys Val Ser His Ile Leu Ala Val Leu Ala Phe Tyr Val Pro Met Ile
              245
                                  250
Gly Val Ser Thr Val His Arg Phe Gly Lys His Ala Pro Arg Tyr Ile
           260
                              265
                                                  270
His Val Leu Met Ser Asn Val Tyr Leu Phe Val Pro Pro Val Leu Asn
       275
                           280
                                      285
Pro Leu Ile Tyr Ser Ala Lys Thr Lys Glu Ile Arg Arg Ala Ile Phe
                     295
Arg Met Phe Arg Arg Ile Lys Leu
                  310
```

<210> 1352 <211> 309 <212> PRT <213> Mus musculus

<400> 1352

<pre><400> 1352 Met Glu Pro Arg Asn Asn Thr His Ile Leu Glu Phe Phe Leu Leu Gly</pre>															
Met 1	Glu	Pro	Arg	Asn 5	Asn	Thr	His	Ile	Leu 10	Glu	Phe	Phe	Leu	Leu 15	Gly
Phe	Ser	Gln	Asp 20	Pro	Asn	Leu	Gln	Pro 25	Val	Ile	Cys	Gly	Leu 30	Phe	Leu
Ser	Met	Tyr 35	Leu	Ile	Thr	Val	Val 40	Gly	Asn	Leu	Leu	Ile 45	Ile	Leu	Thr
Ile	Ile 50	Ser	Asp	Ala	Asn	Leu 55	His	Thr	Pro	Met	Tyr 60	Phe	Phe	Leu	Ser
Asn 65	Leu	Ser	Phe	Val	Asp 70	Ile	Cys	Phe	Val	Ser 75	Thr	Thr	Val	Pro	Lys 80
Met	Leu	Val	Asn	Ile 85	Gln	Thr	Lys	Arg	Lys 90	Ser	Ile	Ser	Tyr	Ala 95	Asp
Cys	Ile	Thr	Gln 100	Met	Tyr	Phe	Phe	Leu 105	Ile	Phe	Val	Glu	Leu 110	Asp	Asn
Phe	Leu	Leu 115	Ala	Val	Met	Ala	Tyr 120	Asp	Arg	Tyr	Val	Ala 125	Ile	Cys	His
	Leu 130					135			_	-	140	-	_		
Val 145	Leu	Val	Cys	Trp	Ile 150	Val	Ser	Val	Leu	His 155	Ala	Leu	Leu	Gln	Ser 160
Met	Met	Val	Leu	Arg 165	Leu	Ser	Phe	Cys	Thr 170	Asp	Leu	Glu	Ile	Pro 175	His
Phe	Phe	Cys	Glu 180	Leu	Asn	Gln	Val	Ala 185	Gln	Leu	Thr	Cys	Ser 190	Asp	Thr
Phe	Leu	Asn 195	Asp	Val	Val	Met	Tyr 200	Phe	Ala	Leu	Val	Leu 205	Leu	Ala	Ile
Val	Pro 210	Leu	Phe	Gly	Ile	Leu 215	Tyr	Ser	Tyr	Ser	Lys 220	Ile	Val	Ser	Ser
Ile 225	Arg	Ala	Met	Ser	Thr 230	Val	Gln	Gly	Lys	Tyr 235	Lys	Ala	Phe	Ser	Thr 240
Cys	Ala	Ser	His	Leu 245	Ser	Val	Val	Ser	Leu 250	Phe	Tyr	Phe	Thr	Gly 255	Leu
Gly	Val	Tyr	Leu 260	Ser	Ser	Ala	Val	Ser 265	His	Ser	Ser	Gln	Ala 270	Ser	Ala
Thr	Ala	Ser 275	Val	Met	Tyr	Thr	Val 280	Val	Thr	Pro	Met	Leu 285	Asn	Pro	Phe
Ile	Tyr	Ser	Leu	Arg	Asn	Lys	Asp	Val	Lys	Gly	Ala	Leu	Lys	Arg	Leu

290 295 300

Leu Gly Val Lys Leu 305

<210> 1353

<211> 312

<212> PRT

<213> Mus musculus

<400> 1353

Met Pro Ser Asn Asn Glu Thr Ala Ser His Pro Ser Leu Phe His Leu 10 Leu Gly Ile Pro Gly Leu Glu Ala Phe His Ile Trp Ile Ala Phe Pro 25 Phe Phe Val Val Tyr Leu Ile Ala Leu Val Gly Asn Phe Thr Ile Leu Cys Val Ile Lys Asn Glu Gln Ser Leu His Gln Pro Met Phe Tyr Phe 55 Leu Ala Leu Leu Ser Phe Ile Asp Leu Gly Leu Ser Thr Ser Thr Ile 75 Pro Lys Met Leu Gly Ile Phe Trp Phe Asn Leu Arg Glu Ile Ser Phe 85 90 Glu Gly Cys Leu Ile Gln Met Phe Phe Ile His Thr Tyr Thr Gly Met 105 Glu Ser Val Val Leu Leu Ala Met Ala Ile Asp Arg Phe Val Ala Ile 120 Cys Tyr Pro Leu Arg Tyr Thr Ser Val Leu Thr Asn Lys Val Val Ala 135 140 Val Met Ala Ser Val Val Ile Gly Arg Pro Val Leu Leu Val Ile Pro 150 155 Phe Cys Pro Leu Leu Lys Arg Leu Pro Phe Cys Gly His Tyr Ile Ile 165 170 Pro His Thr Tyr Cys Glu His Met Gly Ile Ala Arg Leu Ala Cys Ala 185 Asn Ile Arg Ile Asn Ile Ile Tyr Gly Leu Phe Thr Ile Ala Ala Leu 195 200 205 Ile Phe Asp Leu Ile Leu Ile Ala Phe Ser Tyr Ala Trp Ile Leu Gln 215 220 Ala Val Phe Arg Leu Pro Ser Arg Asp Ala Arg His Lys Ala Leu Ser 230 235 Thr Cys Gly Ser His Val Cys Val Ile Leu Ala Phe Tyr Thr Pro Ala 250 245 Phe Phe Ser Phe Met Thr His Arg Phe Gly Arg Asn Val Pro Arg Tyr 260 265 Ile His Ile Leu Leu Ala Asn Leu Tyr Val Val Pro Pro Cys Leu 280 Asn Pro Val Ile Tyr Gly Val Arg Thr Lys Gln Ile Arg Glu Gly Val 295 Leu Lys Ile Phe Val Lys Lys Glu

<210> 1354

<211> 317

<212> PRT

<213> Mus musculus

```
<400> 1354
Met Ile Phe Ser Asn Asn Ser His Leu Leu Pro His Thr Phe Phe Leu
Thr Gly Ile Pro Gly Leu Thr Ala Ala His Val Trp Ile Ser Leu Pro
                                25
Phe Cys Phe Met Phe Val Leu Ser Leu Thr Gly Asn Ala Val Leu Leu
Ser Leu Ile Trp Ile Glu His Arg Leu His Gln Pro Met Phe Leu Phe
Leu Ala Met Leu Ser Phe Val Asp Leu Val Leu Ser Leu Ser Thr Leu
                    70
                                        75
Pro Lys Met Leu Ala Ile Phe Trp Phe Gly Ala Thr Ala Ile Ser Ser
                85
                                    90
Tyr Ala Cys Leu Ser Gln Met Phe Leu Ile His Ala Phe Ser Ala Met
           100
                                105
Glu Ser Gly Val Leu Val Ala Met Ala Leu Asp Arg Phe Val Ala Ile
                            120
                                                125
Cys Asn Pro Leu His Tyr Ala Thr Ile Leu Thr Pro Glu Val Val Ala
                        135
Lys Ile Gly Gly Leu Val Ala Leu Arg Gly Val Gly Leu Thr Ile Phe
                    150
                                        155
Phe Pro Ser Leu Ala Cys Arg Leu Ser Tyr Cys Gly Ser His Thr Ile
                                    170
Ala Tyr Thr Tyr Cys Glu His Met Ser Val Val Lys Leu Ala Cys Gly
           180
                               185
                                                    190
Ala Ile Thr Val Asp Ser Leu Tyr Ala Phe Ala Val Ala Ile Phe Leu
                            200
                                                205
Gly Val Gly Asp Met Ala Phe Ile Ala Tyr Ser Tyr Gly Gln Ile Val
                        215
                                            220
Lys Thr Val Met Arg Phe Pro Ser Pro Glu Ala Arg Gly Lys Ala Gly
                    230
                                        235
Ser Thr Cys Thr Ala His Val Cys Val Ile Leu Phe Phe Tyr Gly Pro
                245
                                    250
Gly Phe Leu Ser Val Val Met Gln Arg Phe Gly Pro Ser Thr Ala Ser
                                265
Ala Ala Lys Val Ile Leu Ala Asn Leu Tyr Leu Leu Phe Pro Pro Ala
                            280
Leu Asp Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu Cys
                        295
Leu Phe Thr Ile Ile Gly Ser Lys Lys Ile Glu Pro Thr
                    310
<210> 1355
<211> 312
<212> PRT
<213> Mus musculus
```

```
Ala Phe Asn Phe Leu Ser Gly Gln Lys Ser Ile Ser Phe Leu Gly Cys
                                    90
Gly Val Gln Ser Phe Phe Phe Leu Thr Met Ala Cys Ser Glu Gly Leu
            100
                                105
                                                    110
Leu Leu Ala Ser Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His Pro
                           120
Leu His Tyr Pro Ile Arg Met Ser Lys Ile Met Cys Leu Lys Met Ile
                                           140
                       135
Ile Gly Ser Trp Ile Leu Gly Ser Ile Asn Ser Leu Ala His Thr Val
                   150
                                        155
Tyr Ala Leu His Ile Pro Tyr Cys His Ser Arg Ser Ile Asn His Phe
               165
                                   170
Phe Cys Asp Val Pro Ala Met Leu Pro Leu Ala Cys Met Asp Thr Trp
                               185
Val Tyr Glu Tyr Met Val Phe Val Ser Thr Ser Leu Phe Leu Leu Leu
        195
                            200
                                                205
Pro Phe Leu Gly Ile Thr Ala Ser Tyr Gly Arg Val Leu Phe Ala Val
                        215
Phe His Met Arg Ser Lys Glu Gly Lys Lys Lys Ala Phe Thr Thr Cys
                230
                                       235
Ser Thr His Leu Thr Val Val Thr Phe Tyr Tyr Ala Pro Phe Val Tyr
               245
                                   250
Thr Tyr Leu Arg Pro Arg Ser Leu Arg Ser Pro Thr Glu Asp Lys Ile
            260
                               265
Leu Ala Val Phe Tyr Thr Ile Leu Thr Pro Met Leu Asn Pro Ile Ile
                           280
                                               285
Tyr Ser Leu Arg Asn Lys Glu Val Leu Gly Ala Met Thr Arg Val Leu
                       295
Gly Thr Phe Pro Ser Thr Lys Pro
305
                    310
<210> 1356
<211> 321
<212> PRT
<213> Mus musculus
<400> 1356
Met Tyr Ser Ile Arg Phe Thr Met Asn Met Lys Tyr Ile Asn Gln Thr
                                    10
Val Val Ser Gly Phe Ile Leu Leu Gly Leu Thr Asp Asp Thr Lys Leu
            20
                                2.5
Gln Leu Ile Ile Phe Ser Val Phe Leu Ser Met Tyr Leu Ala Thr Val
                            40
Ile Gly Asn Leu Leu Ile Ile Leu Ala Thr Asn Phe Asp Ser His Leu
His Thr Pro Met Tyr Phe Phe Leu Ser Val Leu Ser Phe Asn Asp Ile
                    70
                                        75
Phe Leu Val Thr Cys Thr Ile Pro Lys Met Leu Val Asn Ile Gln Thr
Gly Asn Gln Asn Ile Thr Tyr Gly Gly Cys Leu Thr Gln Val Cys Phe
                                105
Val Leu Val Ser Val Gly Met Glu Asn Cys Leu Leu Ala Ala Met Ala
```

120

125

55

Leu Ser Leu Met Asp Leu Met Tyr Ile Ser Thr Thr Val Pro Lys Met

50

```
Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Arg Ile Ile
                       135
                                           140
Met Asn Pro Tyr Leu Cys Ile Leu Met Val Ala Phe Ser Met Ile Gly
                   150
                                       155
Ser Met Ala Asn Ala Leu Val Asn Gly Leu Met Val Leu His Leu Ser
                                   170
Phe Cys Thr Glu Leu Ile Ile Pro His Phe Phe Cys Glu Leu Thr Gln
           180
                               185
Ile Thr Lys Leu Ala Cys Ser Asn Thr Leu Ile Asp Asn Ile Leu Ile
                           200
Tyr Ile Ser Ser Cys Ile Phe Gly Gly Val Pro Leu Ser Gly Ile Ile
                       215
                                            220
Leu Ser Tyr Cys Gln Ile Ala Thr Thr Val Leu Arg Met Ser Ser Ser
                   230
                                       235
Glu Gly Arg Tyr Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ser Val
               245
                                   250
Val Phe Leu Phe Tyr Gly Thr Gly Phe Gly Val Tyr Ile Ser Ser Thr
           260
                               265
Ile Thr Glu Ser Ser Arg Lys Ser Ala Val Ala Ser Val Leu Tyr Ser
                           280
Val Val Pro Gln Met Ile Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg
                       295
                                           300
Asp Met Lys Glu Ala Leu Lys Lys Leu Ile Ser Arg Ile Leu Phe Pro
Leu
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1357

Met Gly Thr Phe Asn Ala Ser Leu Gly Lys Gly Phe Ile Leu Val Gly 5 1.0 Phe Ser Asp Phe Pro Gln Leu Glu Val Phe Leu Phe Val Phe Ile Leu Val Phe Tyr Leu Leu Thr Leu Leu Gly Asn Thr Thr Ile Ile Ala Leu 40 Ser Arg Leu Asp Val Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser 5.5 His Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln 70 75 Leu Leu Ile Asn Leu Cys Gly Leu Asp Arg Thr Ile Ser Tyr Gly Gly 85 Cys Val Ala Gln Leu Leu Ile Phe Leu Ala Leu Val Ser Thr Glu Cys 100 105 Leu Leu Gly Val Met Ala Phe Asp Arg Tyr Ala Ala Val Cys Arg 115 120 Pro Leu His Tyr Thr Thr Ile Met His Pro Gln Leu Cys Gln Gly Leu 135 Ala Ile Ser Ser Trp Val Ser Gly Leu Val Asn Ser Val Ile Gln Thr 155 150 Gly Leu Val Met Ala Met Pro Leu Cys Ser His Arg Leu Asn His Phe 165 170 Phe Cys Glu Met Pro Ile Phe Leu Lys Leu Ala Cys Glu Asp Thr Asn

```
180
                               185
Gly Thr Glu Val Lys Met Phe Val Ala Arg Thr Ile Ile Leu Ile Phe
                           200
Pro Ala Ala Leu Ile Leu Gly Ser Tyr Gly His Ile Ala Arg Ala Ile
                        215
Leu Arg Ile Lys Ser Met Ala Gly Arg Arg Lys Ala Phe Gly Thr Cys
                    230
                                        235
Gly Ser His Leu Ile Val Val Ser Leu Phe Tyr Gly Ser Gly Ile Tyr
               245
                                   250
Thr Tyr Leu Gln Pro Ile His Arg Tyr Ser Glu Asn Glu Gly Lys Phe
                               265
Val Ala Val Phe Tyr Thr Ile Leu Thr Pro Ile Leu Asn Pro Leu Ile
                        280
Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Trp Lys Val Leu
                       295
Gly Lys Gly Thr Asp Leu Val
<210> 1358
<211> 311
<212> PRT
<213> Mus musculus
<400> 1358
Met Gly Ser Phe Asn Thr Ser Phe Arg Gln Gly Phe Phe Leu Val Gly
                                    10
Phe Ser Asp Phe Pro Gln Leu Glu Leu Leu Ser Val Leu Ile Ser
         20
                                25
Ile Phe Tyr Ser Leu Thr Leu Phe Gly Asn Ser Thr Ile Ile Ile Leu
                           40
Ser Gln Leu Asp Ala Arg Leu Gln Met Pro Met Tyr Phe Phe Leu Cys
                       55
His Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Ile Val Pro Gln
                    70
                                        75
Leu Leu Ile Asn Leu Gln Gly Tyr Asp Arg Thr Ile Ser Tyr Gly Gly
                8.5
                                    90
Cys Val Ala Gln Leu Phe Leu Phe Leu Ala Leu Ala Thr Thr Glu Ser
                               105
Val Leu Leu Val Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Arg
       115
                           120
Pro Leu His Tyr Thr Thr Ile Met His Pro Val Leu Cys Leu Ser Leu
                       135
                                            140
Ala Ile Val Ser Trp Val Gly Gly Phe Met Asn Ser Leu Ile Gln Thr
                   150
                                       155
Ser Leu Met Met Ala Val Pro Leu Cys Gly His Arg Leu Asn His Phe
                165
                                    170
Phe Cys Glu Ile Pro Ser Leu Leu Lys Leu Ala Cys Glu Asp Thr Glu
```

180 185 190
Gly Thr Gly Ala Lys Met Phe Val Val Arg Val Val Phe Leu Ile Phe

205

220

235

250

200

215

230

245

Pro Ile Thr Leu Ile Leu Ser Ser Tyr Ala Asn Ile Ala Gln Ala Val

Leu Lys Thr Lys Ser Met Ala Gly Cys Lys Lys Ala Leu Gly Thr Cys

Gly Ser His Leu Val Val Ser Met Phe Tyr Gly Ala Ala Met Tyr

Thr Tyr Leu Gln Pro Lys Gly Thr Tyr Ser Glu Ser Lys Gly Lys Phe 260 265 Val Ala Leu Phe Tyr Ile Ile Val Thr Pro Met Leu Asn Pro Leu Ile 280 Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Trp Lys Val Leu 295 Gly Arg Ala Thr Asp Leu Gly <210> 1359 <211> 311 <212> PRT <213> Mus musculus <400> 1359 Met Asp Val Asp Asn Gln Thr Arg Val Thr Lys Phe Ile Leu Val Gly 10 Phe Pro Gly Ser Leu Ser Met Arg Ala Ala Val Phe Leu Met Phe Leu Val Ala Tyr Ile Leu Thr Val Ala Glu Asn Val Ile Ile Ile Leu Leu 40 Val Gln Gln Asn Arg Pro Leu His Lys Pro Met Tyr Phe Phe Leu Ala 55 Asn Leu Ser Phe Leu Glu Thr Trp Tyr Ile Ser Val Thr Val Pro Lys 70 75 Leu Leu Phe Ser Phe Trp Ser Met Ser Asn Ser Ile Ser Phe Thr His 90 Cys Met Ile Gln Leu Tyr Phe Phe Ile Ala Leu Met Cys Thr Glu Cys 105 100 Val Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg 120 Pro Leu His Tyr Pro Thr Ile Met Ser His Gly Leu Cys Phe Arg Leu 135 Ala Leu Gly Ser Trp Val Ile Gly Phe Gly Ile Ser Leu Ala Lys Ile 150 155 Tyr Phe Ile Ser Arg Leu Ser Phe Cys Gly Pro Asn Val Ile Asn His 165 170 Phe Phe Cys Asp Ile Ser Pro Val Leu Asn Leu Ser Cys Thr Asp Met 185 Ser Ile Ala Glu Leu Val Asp Phe Val Leu Ala Leu Val Ile Phe Leu 195 200 205 Phe Pro Leu Ser Ile Thr Val Leu Ser Tyr Gly Cys Ile Leu Ala Thr 215 220 Val Leu Arg Met Pro Thr Gly Lys Gln Lys Ala Phe Ser Thr Cys Ala 230 235 Ser His Leu Val Val Thr Ile Phe Tyr Ser Ala Thr Ile Phe Met 245 250 Tyr Ala Arg Pro Arg Ala Ile His Ala Phe Asn Met Asn Lys Val Ile 265 Ser Ile Phe Tyr Ala Ile Val Thr Pro Ala Leu Asn Pro Phe Ile Tyr 280 285 Cys Leu Arg Asn Arg Glu Val Lys Glu Ala Leu Lys Lys Leu Ile Tyr

Cys Gln Val Ile Arg Ser Asp 305 310

```
<212> PRT
<213> Mus musculus
<400> 1360
Met Glu Ala Thr Thr Cys Asn Gly Ser Val Asp Gly Ser Thr Val Phe
Tyr Leu Val Gly Ile Pro Ser Leu Pro Glu Pro Phe Tyr Leu Pro Val
                               25
Phe Phe Leu Phe Leu Phe Tyr Leu Leu Ile Leu Val Gly Asn Ala
                          40
Leu Ile Leu Val Ala Val Val Ala Glu Arg Ser Leu His Lys Pro Met
                       55
Tyr Phe Phe Leu Ile Asn Leu Ser Ala Leu Asp Ile Leu Phe Thr Thr
                   70
                                       75
Thr Thr Val Pro Lys Met Leu Ser Leu Leu Leu Gly Asp Arg Phe
               85
                                   90
Leu Ser Phe Pro Ala Cys Leu Leu Gln Met Tyr Leu Phe Gln Ser Phe
                                105
Thr Cys Ser Glu Ala Phe Ile Leu Val Val Met Ala Tyr Asp Arg Tyr
                           120
       115
                                               125
Val Ala Ile Cys Arg Pro Leu His Tyr Pro Val His Met Thr Pro Gln
                       135
                                           140
Thr Asn Thr Ala Leu Ala Ala Ser Ala Trp Ile Thr Ala Leu Leu Leu
                   150
                                       155
Pro Val Pro Ala Val Ile Lys Thr Ser Gln Met Val Tyr Asn Asp Ile
               165
                                   170
                                                      175
Ala Tyr Ile Tyr His Cys Phe Cys Asp His Leu Ala Leu Val Gln Ser
           180
                               185
Ser Cys Ser Asp Thr Thr Pro Gln Thr Leu Met Gly Phe Cys Ile Ala
                           200
Met Val Val Ser Phe Leu Pro Leu Leu Leu Val Leu Leu Ser Tyr Val
                                ,
                       215
Arg Ile Leu Thr Ser Val Leu Gln Ile Asn Ser Lys Glu Gly Arg Ser
                                       235
                   230
Lys Ala Phe Ser Thr Cys Ser Ser His Leu Leu Val Val Gly Thr Tyr
                                   250
Tyr Ser Ser Ile Ala Ile Ala Tyr Val Ala Tyr Arg Ala Asp Leu Pro
           260
                               265
Leu Asp Phe His Ile Met Gly Asn Val Val Tyr Ser Ile Leu Thr Pro
                           280
                                               285
Ile Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Ala
                       295
Ala Ile Thr Lys Ile Val Tyr Leu Lys Gly Met Met
                    310
<210> 1361
<211> 316
<212> PRT
<213> Mus musculus
<400> 1361
Met Glu Pro Trp Asn Ser Thr Leu Glu Ser Gly Phe Ile Leu Val Gly
```

<210> 1360 <211> 316

```
Ile Leu Asp Gly Ser Gly Ser Pro Glu Leu Leu Cys Ala Thr Val Thr
                               25
Thr Leu Tyr Met Leu Ala Leu Ile Ser Asn Gly Leu Leu Leu Val
Ile Thr Val Asp Ala Arg Leu His Val Pro Met Tyr Leu Leu Leu Arg
Gln Leu Ser Leu Ile Asp Leu Leu Phe Thr Ser Val Val Thr Pro Asn
                   70
                                       75
Thr Val Val Asp Phe Leu Leu Arg Asp Asn Thr Ile Ser Phe Glu Gly
Cys Ala Leu Gln Leu Phe Ser Ala Met Thr Leu Gly Gly Ala Glu Asp
                               105
           100
Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                          120
Pro Leu Asn Tyr Met Ile Phe Met Ser Pro Lys Ala Cys Arg Leu Met
                       135
                                          140
Val Ala Ile Ser Trp Ile Leu Ala Ser Leu Ser Ala Leu Gly His Thr
                   150
                                       155
Val Tyr Thr Met His Phe Pro Phe Cys Met Ser Gln Glu Ile Arg His
                165
                                   170
Leu Leu Cys Glu Val Pro Pro Leu Leu Lys Leu Ala Cys Ala Asp Thr
                               185
Ser Gln Tyr Glu Leu Met Val Tyr Val Thr Gly Val Ile Phe Leu Leu
                           200
                                               205
Leu Pro Leu Ser Ala Ile Ile Thr Ser Tyr Ser Leu Ile Leu Phe Thr
                       215
                                            220
Val Leu His Met Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Thr
                   230
                                        235
Cys Ser Ser His Leu Thr Val Val Gly Met Phe Tyr Gly Gly Ala Thr
                                   250
               245
Phe Met Tyr Val Leu Pro Ser Ser Phe His Ser Pro Lys Gln Asp Asn
                               265
Ile Ile Ser Val Phe Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile Gly Ala Val Arg Arg Val
                       295
Leu Gly Arg His Ile Leu Pro Ala His Ala Thr Val
                    310
```

<211> 315 <212> PRT

<213> Mus musculus

<400> 1362

 Met
 Trp
 Ile
 Asn
 Asn
 Gln
 Ser
 Ser
 Val
 Asp
 Asp
 Phe
 Ile
 Leu
 Leu
 Gly

 Phe
 Ser
 Asp
 Arg
 Pro
 Trp
 Leu
 Glu
 Thr
 Pro
 Leu
 Phe
 Val
 Ile
 Phe
 Leu
 Asp
 Ile
 Phe
 Leu
 Val
 Asp
 Ile
 Ile
 Phe
 Leu
 Val
 Asp
 Ile
 Ile
 Ile
 Ile
 Phe
 Leu
 Val
 Asp
 Ile
 Ile

```
85
                                    90
Cys Val Ala Gln Leu Tyr Ile Phe Leu Ala Leu Gly Ser Thr Glu Cys
                               105
Ile Leu Leu Ala Ile Met Ala Phe Asp Arg Phe Ala Ala Ile Cys Arg
                            120
Pro Leu His Tyr Pro Ile Ile Met Asn Gln Lys Arg Cys Ile His Met
                        135
                                            140
Ala Thr Gly Thr Trp Ile Ser Gly Phe Ala Asn Ser Leu Val Gln Ser
                   150
                                       155
Thr Leu Thr Val Val Ala Pro Arg Cys Gly Gln Arg Val Ile Asp His
               165
                                    170
Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ala Cys Thr Asp Thr
           180
                               185
Ser Val Asn Glu Ala Glu Leu Asn Val Leu Gly Ala Leu Leu Leu Leu
                           200
                                                205
Val Pro Leu Ser Leu Ile Leu Gly Thr Tyr Val Phe Ile Ala Gln Ala
                        215
Val Leu Lys Leu Arg Ser Ala Glu Ser Arg Arg Lys Ala Phe Asn Thr
                    230
                                        235
Cys Ala Ser His Leu Leu Val Val Ser Leu Phe Tyr Phe Thr Ala Ile
                245
                                    250
Ser Met Tyr Val Gln Pro Pro Ser Ser Tyr Ser His Glu Arg Gly Lys
            260
                                265
Ile Met Ala Leu Phe Tyr Gly Ile Val Thr Pro Thr Leu Asn Pro Phe
                           280
Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Ala Ala Leu Arg Arg Ala
                       295
Leu Thr Lys Glu Phe Trp Val Lys Ala Arg Gln
                    310
```

<211> 322

<212> PRT

<213> Mus musculus

<400> 1363

Met Ile His Ser Asn Ile Thr Pro Ile His Pro Ala Phe Phe Val Leu Val Gly Ile Pro Gly Leu Glu Ala Tyr His Thr Trp Leu Ser Ile Pro 25 Leu Cys Leu Met Tyr Val Thr Ala Val Leu Gly Asn Ser Ile Leu Ile Met Val Ile Ile Thr Glu Arg Asn Leu His Glu Pro Met Tyr Phe Phe 55 Leu Ser Met Leu Ala Ile Thr Asp Ile Leu Leu Ser Thr Thr Thr Val Pro Lys Ala Leu Thr Ile Phe Trp Leu His Ala His Asn Ile Ala Phe 90 Asp Ala Cys Val Thr Gln Val Phe Phe Val His Thr Met Phe Val Gly 100 105 Glu Ser Ala Ile Leu Leu Ala Met Ala Phe Asp Arg Phe Ile Ala Ile 120 Cys Ala Pro Leu Arg Tyr Ala Thr Val Leu Thr Trp Ser Thr Val Gly 135 140 Arg Ile Ala Leu Ala Ile Val Ile Arg Ser Ile Cys Ile Ile Phe Pro 150 155

```
Val Ile Phe Leu Leu Lys Arg Leu Pro Phe Cys Arg Thr Asn Ile Val
                165
                                    170
Pro His Ser Tyr Cys Glu His Ile Gly Val Ala Arg Leu Ala Cys Ala
                                185
Asp Ile Thr Val Asn Ile Trp Tyr Gly Phe Ser Val Pro Ile Val Met
                            200
Val Ile Val Asp Val Ile Leu Ile Ala Val Ser Tyr Ser Leu Ile Leu
                        215
                                            220
Arg Ala Val Phe Arg Leu Pro Ser Gln Asp Ala Arg His Lys Ala Leu
                    230
                                        235
Ser Thr Cys Gly Ser His Leu Cys Val Ile Leu Met Phe Tyr Val Pro
               245
                                    250
Ser Phe Phe Thr Leu Leu Thr His Arg Phe Gly Arg Asn Ile Pro Arg
           260
                                265
His Val His Ile Leu Leu Ala Asn Leu Tyr Val Val Pro Pro Met
                            280
                                                285
Leu Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu Gly
                       295
                                            300
Val Val His Trp Phe Leu Asp Ile Lys Thr Leu Cys Cys Ser Ser Pro
305
                    310
                                        315
Leu Gly
```

<211> 310

<212> PRT

<213> Mus musculus

<400> 1364

Met Ser Glu Ala Asn Ser Ser Ser Leu Thr Pro Glu Phe Phe Ile Leu Asn Gly Ile Arg Gly Leu Glu Asp Ala His Val Trp Ile Ser Leu Pro Phe Cys Phe Met Tyr Met Ile Ala Val Val Gly Asn Cys Gly Leu Ile Tyr Leu Ile Gly His Glu Glu Ala Leu His Arg Pro Met Tyr Tyr Phe 55 Leu Thr Leu Leu Ser Phe Thr Asp Ile Thr Leu Cys Thr Thr Thr Val Pro Asn Met Leu Cys Ile Phe Trp Phe Asn Leu Lys Lys Ile Gly Phe 90 Lys Ala Cys Leu Ala Gln Met Phe Phe Val His Thr Phe Thr Ala Thr 100 105 110 Glu Ser Gly Met Leu Met Leu Met Ala Leu Asp Arg Tyr Val Ala Ile 120 125 Cys Tyr Pro Leu Arg Tyr Gly Thr Ile Leu Thr Asn Pro Val Ile Ala 135 140 Lys Ala Ser Leu Ala Thr Phe Leu Arg Ser Val Ala Phe Ile Leu Pro 150 155 Phe Thr Phe Leu Thr Lys Arg Leu Pro Tyr Cys Arg Gly Asn Leu Ile 165 170 Pro His Ala Tyr Cys Asp His Met Ser Val Ala Lys Ile Ser Cys Gly 185 Asn Val Lys Ile Asn Ala Val Tyr Gly Leu Leu Val Ala Leu Val Val 200 205 Cys Ala Phe Asp Ile Phe Cys Ile Thr Val Ser Tyr Thr Met Ile Leu

```
210
                       215
                                            220
Arg Ala Val Met Asn Leu Ser Ser Ala Asp Ala Arg His Lys Ala Phe
                    230
                                        235
Ser Thr Cys Thr Ser His Ile Cys Ala Ile Val Ile Thr Tyr Val Pro
                245
                                    250
Ala Phe Phe Asn Phe Phe Thr His Arg Phe Gly Ala His Thr Ile Pro
                                265
His His Ile His Ile Ile Val Ala Asn Leu Tyr Leu Leu Leu Pro Ala
                           280
Thr Met Asn Pro Ile Val Tyr Gly Val Lys Thr Gln Ala Asp Ser Gly
                        295
Glu Cys Asn Gln Ile Phe
<210> 1365
<211> 318
<212> PRT
<213> Mus musculus
<400> 1365
Met Ser Gly Ala Asn Ser Ser Ser Leu Thr Pro Glu Phe Phe Ile Leu
Asn Gly Val Pro Gly Leu Glu Asp Ala His Val Trp Ile Ser Leu Pro
                                25
Phe Cys Phe Met Tyr Met Ile Ala Val Val Gly Asn Cys Gly Leu Ile
                            40
Tyr Leu Ile Gly His Glu Glu Ala Leu His Arg Pro Met Phe Tyr Phe
                        55
                                            60
Leu Ala Leu Leu Ser Phe Thr Asp Val Thr Trp Cys Thr Thr Thr Val
Pro Asn Met Leu Cys Ile Phe Trp Phe Asn Phe Lys Lys Ile Gly Phe
                                    90
                8.5
Asn Ser Cys Leu Ala Gln Met Phe Phe Val His Met Leu Thr Gly Met
                                105
Glu Ser Gly Val Leu Met Leu Met Ala Leu Asp Arg Tyr Val Ala Ile
       115
                           120
                                                125
Cys Asn Pro Leu Arg Tyr Thr Thr Ile Leu Thr Asn Pro Val Ile Ala
                       135
                                            140
Lys Ala Cys Leu Ala Thr Phe Leu Arg Ser Val Met Leu Ile Phe Pro
                   150
                                        155
Phe Thr Leu Leu Thr Lys Arg Leu Pro Tyr Cys Arg Ser Ile Leu Ile
               165
                                    170
Pro His Thr Tyr Cys Asp His Met Ser Val Ala Lys Val Ser Cys Gly
                                185
Asn Ala Lys Val Asn Ala Ile Tyr Gly Leu Met Val Ala Leu Leu Ile
        195
                            200
                                                205
Gly Val Phe Asp Ile Cys Cys Ile Ser Val Ser Tyr Thr Met Ile Leu
                        215
                                            220
Arg Ala Val Val Ser Leu Ser Ser Ala Asp Ala Arg His Lys Ala Phe
                    230
                                        235
Ser Thr Cys Thr Ser His Ile Cys Ala Ile Val Ile Thr Tyr Val Pro
                245
                                    250
Ala Phe Phe Thr Phe Phe Thr His Arg Phe Gly Gly His Thr Ile Pro
                               265
His His Val His Ile Ile Val Ala Asn Leu Tyr Leu Leu Pro Pro
```

280

285

Thr Met Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu 295 Ser Val Ile Lys Phe Leu Leu Gly Asp Lys Met Gly Phe Thr 310 <210> 1366 <211> 316 <212> PRT <213> Mus musculus <400> 1366 Met Ile Lys Phe Asn Gly Ser Val Phe Met Pro Ser Val Leu Thr Leu 10 Val Gly Ile Pro Gly Leu Glu Ser Val Gln Cys Trp Ile Gly Ile Pro 20 25 Phe Cys Val Met Tyr Ile Ile Ala Met Ile Gly Asn Ser Leu Ile Leu Val Ile Ile Lys Ser Glu Lys Ser Leu His Ile Pro Met Tyr Ile Phe 55 Leu Ala Ile Leu Ala Val Thr Asp Ile Ala Leu Ser Thr Cys Ile Leu 70 75 Pro Lys Met Leu Gly Ile Phe Trp Phe His Met Pro Gln Ile Ser Phe 85 90 Asp Ala Cys Leu Leu Gln Met Glu Leu Ile His Ser Phe Gln Ala Thr 105 110 Glu Ser Gly Ile Leu Leu Ala Met Ala Leu Asp Arg Tyr Val Ala Ile 120 Cys Asn Pro Leu Arg His Ala Thr Ile Phe Ser Pro Gln Leu Thr Thr 140 135 Cys Leu Gly Ala Gly Ala Leu Leu Arg Ser Leu Ile Thr Thr Phe Pro 150 155 Leu Ile Leu Leu Ile Lys Phe Cys Leu Lys Tyr Phe Arg Thr Thr Ile 165 170 Ile Ser His Ser Tyr Cys Glu His Met Ala Ile Val Lys Leu Ala Ala 185 Gln Asp Ile Arg Ile Asn Lys Ile Cys Gly Leu Leu Val Ala Phe Ala 200 205 Ile Leu Gly Phe Asp Ile Val Phe Ile Thr Phe Ser Tyr Val Arg Ile 215 220 Phe Ile Thr Val Phe Gln Leu Pro Gln Lys Glu Ala Arg Phe Lys Ala 230 235 Phe Asn Thr Cys Ile Ala His Ile Cys Val Phe Leu Gln Phe Tyr Leu 245 250 Leu Ala Phe Phe Ser Phe Phe Thr His Arg Phe Gly Ala His Ile Pro 265 Pro Tyr Val His Ile Leu Leu Ser Asp Leu Tyr Leu Leu Val Pro Pro 280 285 Phe Leu Asn Pro Ile Val Tyr Gly Ile Lys Thr Lys Gln Ile Arg Asp 295

Gln Val Leu Lys Met Phe Phe Ser Lys Lys Pro Leu 305 310 315

<210> 1367 <211> 315

<212> PRT

```
<400> 1367
Met Ile Lys Phe Asn Gly Ser Val Phe Met Pro Ser Val Leu Thr Leu
Val Gly Ile Pro Gly Leu Glu Ser Val Gln Cys Trp Ile Gly Ile Pro
                                25
Phe Cys Val Met Tyr Ile Ile Ala Met Ile Gly Asn Ser Leu Ile Leu
                            40
Val Ile Ile Lys Ser Glu Lys Ser Leu His Ile Pro Met Tyr Ile Phe
                       55
Leu Ala Ile Leu Ala Val Thr Asp Ile Ala Leu Ser Thr Cys Ile Leu
                    70
Pro Lys Met Leu Gly Ile Phe Trp Phe His Met Pro Gln Ile Ser Phe
               85
                                   90
Asp Ala Cys Leu Gln Met Glu Leu Ile His Ser Phe Gln Ala Thr
                               105
Glu Ser Gly Ile Leu Leu Ala Met Ala Leu Asp Arg Tyr Val Ala Ile
                            120
                                                125
Cys Asn Pro Leu Arg His Ala Thr Ile Phe Ser Pro Gln Leu Thr Thr
                        135
                                            140
Cys Leu Gly Ala Gly Ala Leu Leu Arg Ala Phe Ile Leu Val Ser Pro
                  150
                                       155
Ser Ile Leu Leu Ile Lys Cys Arg Leu Lys Tyr Phe Arg Thr Thr Ile
               165
                                   170
Ile Ser His Ser Tyr Cys Glu His Met Ala Ile Val Lys Leu Ala Ala
           180
                                185
Gln Asp Ile Arg Ile Asn Lys Ile Cys Gly Leu Leu Val Ala Phe Ala
                           200
                                                205
Ile Leu Gly Phe Asp Ile Val Phe Ile Thr Phe Ser Tyr Val Arg Ile
                       215
                                           220
Phe Ile Thr Val Phe Gln Leu Pro Gln Lys Glu Ala Arg Phe Lys Ala
                    230
                                        235
Phe Asn Thr Cys Ile Ala His Ile Cys Val Phe Leu Gln Phe Tyr Leu
                                    250
Leu Ala Phe Phe Ser Phe Phe Thr His Arg Phe Gly Ala His Ile Pro
                               265
Pro Tyr Val His Ile Leu Leu Ser Asp Leu Tyr Leu Leu Val Pro Pro
                           280
Phe Leu Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Asp
                       295
Gln Val Leu Lys Met Leu Phe Ser Lys Lys His
                    310
<210> 1368
<211> 312
```

```
<212> PRT
```

<213> Mus musculus

<400> 1368 Met Ser Glu Ser Leu Pro Val Thr Leu Phe Leu Thr Gly Ile Pro Gly 10 Leu Glu Phe Ala His Leu Trp Ile Ala Ile Pro Phe Cys Val Met Tyr 25 Val Val Ala Leu Leu Gly Asn Ala Ala Leu Ile Leu Ile Ile Gly Thr 40

```
Glu Ser Val Leu His Thr Pro Met Tyr Leu Phe Leu Cys Leu Leu Ser
                        55
Leu Thr Asp Leu Ala Leu Ser Ser Thr Thr Val Pro Lys Met Leu Ala
                    70
                                        75
Ile Leu Trp Leu His Ser Asn Glu Ile Ser Phe Gly Gly Cys Leu Ala
                                    90
Gln Met Phe Cys Val His Ser Ile Tyr Ala Leu Glu Ser Ser Val Leu
            100
                                105
Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg
                            120
                                                125
Tyr Thr Thr Ile Leu Asn His Thr Val Ile Ala Gln Ile Ile Phe Ala
                       135
                                            140
Gly Ile Val Arg Ser Val Ala Ile Val Ser Pro Phe Ile Phe Leu Leu
                    150
                                        155
Arg Arg Leu Pro Tyr Cys Gly His Arg Val Met Thr His Thr Tyr Cys
                                    170
               165
Glu His Met Gly Ile Ala Arg Leu Ala Cys Ala Asn Ile Thr Val Asn
                                185
Ile Val Tyr Gly Leu Thr Val Ala Leu Leu Ala Met Gly Leu Asp Ser
       195
                            200
Ile Leu Ile Ala Ile Ser Tyr Gly Phe Ile Leu Arg Ala Val Phe Arg
                        215
                                            220
Leu Pro Ser Arg Asp Ala Gln His Lys Ala Leu Ser Thr Cys Gly Ser
                   230
                                        235
His Leu Gly Val Ile Leu Val Phe Tyr Ile Pro Ala Phe Phe Ser Phe
               245
                                    250
Leu Thr His Arg Phe Gly His Asn Arg Val Pro Lys His Val His Ile
            260
                                265
Phe Leu Ala Asn Leu Tyr Val Leu Val Pro Pro Val Leu Asn Pro Ile
                           280
       275
                                                285
Ile Tyr Gly Ala Arg Thr Lys Glu Ile Arg Ser Arg Leu Leu Lys Leu
                       295
Leu His Leu Gly Lys Asp Leu Val
                    310
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1369

 Met
 Val
 Met
 His
 Asn
 Val
 Ser
 Ser
 Tyr
 Asn
 Thr
 Gly
 Pro
 Phe
 Thr
 Leu

 Ser
 Gly
 Ile
 Pro
 Gly
 Leu
 Glu
 Gln
 Tyr
 His
 Val
 Tyr
 His
 Ser
 Ile
 Ser
 Ile
 Pro
 Ju
 Leu
 Leu
 Ju
 Ju

```
115
                           120
                                               125
Cys Ser Pro Leu Arg Tyr Thr Thr Ile Leu Thr Pro Lys Thr Ile Val
                       135
Lys Ile Ala Val Gly Ile Ser Phe Arg Ser Phe Cys Val Phe Val Pro
                    150
                                        155
Cys Val Phe Leu Val Asn Arg Leu Pro Phe Cys Arg Thr His Ile Ile
               165
                                    170
Ala His Thr Tyr Cys Glu His Ile Gly Val Ala Arg Leu Ala Cys Ala
           180
                               185
Asp Ile Ser Ile Asn Ile Trp Tyr Gly Phe Cys Val Pro Ile Met Thr
                           200
                                               205
Val Ile Ile Asp Val Ile Leu Ile Ala Ile Ser Tyr Thr Leu Ile Leu
                       215
Cys Ala Val Phe Arg Leu Pro Ser Arg Asp Ala Arg Gln Lys Ala Leu
                   230
                                       235
Ser Thr Cys Gly Ser His Val Cys Val Ile Leu Met Phe Tyr Ile Pro
                                   250
Ala Phe Phe Ser Ile Leu Ala His Arg Phe Gly Arg Asn Val Pro Arg
            260
                                265
Thr Phe His Ile Met Phe Ala Asn Leu Tyr Val Ile Ile Pro Pro Ala
                            280
Leu Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Asp Lys
                       295
Ala Ile Leu Leu Phe Pro Lys
                    310
```

<211> 319

<212> PRT

<213> Mus musculus

<400> 1370

Met Met Tyr Ser Leu Met Leu Ala Ser Arg Asn Ser Ser Ser His Ser Thr Phe Phe Ile Leu Gly Ile Pro Gly Leu Glu Asn Tyr Gln Phe 25 Trp Val Ala Phe Pro Phe Cys Val Met Tyr Ile Val Ala Val Thr Gly 40 Asn Ile Thr Ile Leu His Ile Ile Arg Ile Asp His Thr Leu His Glu 55 Pro Met Tyr Leu Phe Leu Ala Met Leu Ala Thr Thr Asp Leu Val Leu 75 Ser Ser Ser Thr Gln Pro Lys Met Leu Ala Ile Leu Trp Phe His Asp 85 90 His Lys Ile Glu Tyr His Ala Cys Leu Ile Gln Val Phe Phe Ile His 105 Ala Phe Ser Ser Val Glu Ser Gly Val Leu Met Thr Met Ala Leu Asp 120 Arg Tyr Val Ala Ile Cys Phe Pro Leu Arg His Ser Ser Ile Leu Thr 135 140 Thr Ser Ala Val Ile Lys Leu Gly Ala Val Val Met Val Arg Gly Leu 150 155 Leu Trp Val Ser Pro Phe Cys Phe Met Val Ser Arg Met Pro Phe Cys 165 170 Pro Asn Lys Ile Ile Pro Gln Ser Tyr Cys Glu His Met Ala Val Leu

```
Lys Leu Val Cys Ala Asp Thr Arg Val Asn Arg Gly Tyr Gly Leu Phe
                            200
Val Ala Phe Ser Val Val Gly Phe Asp Ile Ile Val Ile Ser Val Ser
                        215
Tyr Val Met Ile Leu Arg Ala Val Leu Arg Leu Pro Ser Gly Glu Ala
                    230
                                        235
Arg Leu Lys Ala Phe Gly Thr Cys Ala Ser His Ile Gly Val Ile Leu
                245
                                    250
Thr Leu Tyr Ile Pro Ala Leu Phe Thr Phe Leu Thr His Arg Phe Gly
                                265
His His Val Pro Arg Val Val His Ile Met Phe Ala Asn Val Tyr Leu
                            280
Leu Val Pro Pro Met Leu Asn Pro Ile Ile Tyr Gly Val Arg Thr Lys
                       295
Gln Ile Arg Asp Arg Val Thr Arg Gly Phe Cys Val Lys Gly Ser
                    310
                                        315
```

<211> 319

<212> PRT

<213> Mus musculus

<400> 1371

Met Met His Ser Leu Met Leu Ala Ser Arg Asn Asn Ser Ser His Ser 10 Thr Phe Phe Ile Leu Leu Gly Ile Pro Gly Leu Glu Asn Tyr Gln Phe 25 Trp Val Ala Phe Pro Phe Cys Val Met Tyr Ile Val Ala Val Thr Gly 40 45 Asn Ile Thr Ile Leu His Ile Ile Arg Ile Asp His Thr Leu His Glu 55 Pro Met Tyr Leu Phe Leu Ala Met Leu Ala Thr Thr Asp Leu Val Leu 70 75 Ser Ser Ser Thr Gln Pro Lys Met Leu Ala Ile Leu Trp Phe His Asp His Lys Ile Glu Tyr His Ala Cys Leu Ile Gln Val Phe Phe Ile His 105 Ala Phe Ser Ser Val Glu Ser Gly Val Leu Met Asp Met Ala Leu Asp 120 Arg Tyr Val Ala Ile Cys Phe Pro Leu Arg His Ser Ser Ile Leu Thr 135 140 Thr Ser Val Val Ile Lys Leu Gly Val Ala Val Met Val Arg Gly Leu 150 155 Leu Trp Val Ser Pro Phe Cys Phe Met Val Ser Arg Met Pro Phe Cys 165 170 Pro Asn Lys Val Ile Pro Gln Ser Tyr Cys Glu His Met Ala Val Leu 185 Lys Leu Val Cys Ala Asp Thr Arg Val Asn Arg Gly Tyr Gly Leu Phe 200 Val Ala Phe Ser Val Ala Val Phe Asp Leu Ala Val Ile Ser Val Ser 215 220 Tyr Ala Met Ile Leu Arg Ala Val Leu Arg Leu Pro Ser Gly Glu Ala 230 235 Arg Leu Lys Ala Phe Gly Thr Cys Ala Ser His Ile Gly Val Ile Leu 245 250 Thr Leu Tyr Ile Pro Ala Leu Phe Thr Phe Leu Thr His Arg Phe Gly

260 265 His His Val Pro Arg Ile Val His Ile Met Phe Ala Asn Val Tyr Leu 275 280 285 Leu Val Pro Pro Met Leu Asn Pro Ile Ile Tyr Gly Val Arq Thr Lys 295 Gln Ile Arg Asp Arg Val Thr Gln Ala Phe Cys Gly Lys Gly Ser 310 <210> 1372 <211> 317 <212> PRT <213> Mus musculus <400> 1372 Met Ile Leu Pro Asn Asp Thr Gln Phe His Pro Ser Thr Phe Leu Leu 10 Leu Gly Ile Pro Gly Leu Glu Ser Leu His Ile Trp Ile Gly Phe Pro 25 Phe Cys Val Val Tyr Met Ile Ala Leu Leu Gly Asn Leu Thr Ile Leu Phe Val Ile Lys Thr Glu Ser Ser Leu His Gln Pro Met Phe Tyr Phe 55 Leu Ala Met Leu Ala Thr Ile Asp Leu Gly Leu Ser Thr Ala Thr Ile 70 75 Pro Lys Met Leu Gly Ile Phe Trp Ile Asn Leu Arg Glu Ile Leu Phe 90 Glu Asp Cys Leu Ile Gln Met Phe Phe Ile His Lys Phe Thr Leu Met 105 Glu Ser Thr Val Leu Leu Ala Met Ala Tyr Asp His Tyr Val Ala Ile 120 , 125 Cys Ile Pro Leu Arg Tyr Ser Thr Ile Leu Thr Asn Lys Val Val Ser 135 140 Met Ile Gly Ile Ala Val Leu Val Arg Ala Ile Ile Phe Val Ile Pro 150 155 Phe Ile Phe Leu Ile Leu Arg Leu Pro Phe Cys Gly His His Ile Ile 165 170 Pro His Thr Tyr Cys Glu His Met Gly Leu Ala Arg Leu Ser Cys Ala 180 185 Ser Val Lys Ala Asn Val Ile Tyr Gly Leu Cys Ala Ile Cys Asn Leu 200 205 Leu Phe Asp Ile Val Ala Ile Val Leu Ser Tyr Ile Gln Ile Leu Arg 215 Val Val Phe His Leu Pro Ser Arg Glu Ala Arg Leu Lys Ser Leu Asn 230 235 Thr Cys Gly Ser His Val Cys Val Ile Leu Ala Phe Tyr Thr Pro Ala

Ile His Ile Leu Leu Ala Asn Leu Tyr Val Val Val Pro Pro Met Leu 275 280 285

Asn Pro Val Ile Tyr Gly Val Arg Thr Lys Gln Ile Tyr Asp Arg Val 290 295 300

Lys Lys Ile Leu Leu Gln Val Arg Gly Lys Glu Lys Glu

310

Leu Phe Ser Phe Met Thr His Arg Phe Gly Arg Asn Val Pro Arg Tyr

265

315

```
<211> 317
<212> PRT
<213> Mus musculus
<400> 1373
Met Ser Cys Ala Pro Asn Ala Ser His Ser Pro Ile Phe Leu Leu Leu
                                    10
Gly Phe Ser Arg Ala Gly Val Pro His Thr Phe Leu Phe Leu Leu Phe
                                25
Leu Phe Ile Tyr Leu Thr Thr Ile Leu Gly Asn Val Thr Leu Val Leu
                            40
Leu Ile Ser Trp Asp Ser Arg Leu His Ser Pro Met Tyr Tyr Leu Leu
                        55
Arg Gly Leu Ser Met Ile Asp Leu Gly Leu Ser Thr Val Thr Leu Pro
                    70
                                        75
Gln Leu Leu Val His Leu Ser Ser Asp Ser Pro Ala Ile Pro Ala Ala
                85
                                    90
Arg Cys Leu Thr Gln Phe Phe Phe Phe Tyr Ala Phe Gly Val Thr Asp
            100
                                105
Thr Leu Val Ile Ala Val Met Ala Leu Asp Arg Tyr Val Ala Ile Cys
                            120
       115
                                                125
Asp Pro Leu His Tyr Ala Leu Val Met Asn Arg Gln Ile Cys Ala Arg
                       135
                                            140
Leu Leu Ala Leu Ser Trp Val Val Ser Ile Val His Thr Met Leu His
                   150
                                        155
Val Gly Leu Ile Leu Pro Leu Cys Trp Ala Gly Asp Ala Gly Gly Asn
               165
                                    170
Val Lys Leu Pro His Phe Phe Cys Asp His Arg Pro Leu Leu Arg Ala
                                185
           180
Ser Cys Ser Asp Thr His Ser Asn Glu Leu Ala Ile Phe Leu Glu Gly
                           200
Gly Phe Leu Met Leu Gly Pro Cys Ser Leu Ile Val Leu Ser Tyr Ala
                        215
Arg Ile Gly Ile Thr Ile Leu Arg Leu Pro Ser Ala Ala Gly Arg Arg
                    230
                                        235
Arg Ala Val Ser Thr Cys Gly Ser His Leu Thr Met Val Gly Phe Leu
                245
                                    250
Tyr Gly Thr Ile Ile Trp Val Tyr Phe Gln Pro Pro Ser Gln Asn Ser
                                265
Arg Asn Gln Asp Met Val Ala Ser Val Met Tyr Thr Ala Ile Thr Pro
       275
                            280
                                                285
Leu Ala Asn Pro Phe Val Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly
                        295
Ala Leu His Arg Leu Leu Arg Gln Gly Arg Val Asp Ser
305
                    310
<210> 1374
<211> 322
<212> PRT
<213> Mus musculus
<400> 1374
Met Leu Leu Asn Gln Thr Glu Val Thr Pro Val Ser Phe Ile Leu
```

10

Asn Gly Ile Pro Gly Leu Glu Glu Met His Ile Trp Ile Ser Phe Pro

<210> 1373

```
25
Phe Cys Ser Met Tyr Val Ile Ala Val Val Gly Asn Cys Gly Leu Leu
                            40
Tyr Leu Ile Phe Phe Glu Asp Ser Leu His Arg Ser Met Tyr Tyr Phe
                       55
Leu Ala Met Leu Ser Leu Thr Asp Leu Val Met Cys Ser Ala Ser Ile
Pro Lys Thr Leu Cys Ile Phe Trp Phe Tyr Ile Lys Glu Ile Ser Phe
                                    90
Thr Asp Cys Leu Val Gln Met Phe Phe Ile His Thr Phe Thr Ala Met
                               105
Glu Ser Gly Val Leu Met Leu Met Ala Leu Asp Arg Tyr Val Ala Ile
                           120
Cys Tyr Pro Leu His Tyr Ser Thr Ile Leu Thr Asn Pro Val Ile Ala
                       135
                                           140
Lys Ala Gly Leu Ala Thr Phe Leu Arg Ala Val Val Leu Ile Ile Pro
                   150
                                       155
Leu Ile Phe Ile Thr Lys His Leu Pro Phe Cys Arg Ser Asn Ile Leu
                                    170
                165
Ile His His Thr Tyr Cys Asp Gln Leu Ser Val Ala Lys Val Ser Cys
                                185
Gly Asn Ile Lys Val Asn Ile Val Tyr Gly Leu Met Ile Ala Leu Phe
                           200
Ile Gly Gly Phe Asp Ile Leu Cys Ile Thr Val Ser Tyr Thr Met Ile
                       215
Leu Lys Ala Val Val Ser Leu Ser Ser Ala Asp Ala Arg Gln Lys Ala
                    230
                                        235
Phe Ser Thr Cys Thr Ala His Ile Cys Ala Ile Val Phe Ser Tyr Ser
               245
                                   250
Pro Ala Phe Phe Cys Phe Phe Ser His Arg Phe Gly Gly His Ile Ile
                               265
           260
Pro Pro Ser Cys Leu Ile Ile Val Ala Asn Leu Tyr Leu Leu Pro
                            280
Pro Thr Met Asn Pro Val Val Tyr Gly Val Lys Thr Lys Gln Ile Arg
                       295
Asp Cys Val Ile Arg Ile Phe Ser Gly Ser Lys Asp Ile Lys Ser His
305
                    310
Ser Ile
```

```
<210> 1375
```

<400> 1375

 Met
 Val
 Met
 Ser
 Val
 Gln
 Asn
 Ser
 Thr
 Asp
 Leu
 Thr
 Pro
 Ala
 Ser
 Phe

 Val
 Leu
 Asn
 Gly
 Ile
 Pro
 Gly
 Leu
 Glu
 Asp
 Met
 His
 Ile
 Trp
 Ile
 Ser

 Phe
 Pro
 Pro
 Pro
 Pro
 Pro
 Pro
 Pro
 Ala
 Val
 Ala
 Met
 Met
 Gly
 Asn
 Cys
 Gly

 Phe
 Leu
 Tyr
 Leu
 Ile
 Pro
 Pro
 Gly
 Asn
 Cys
 Gly

 Ass
 Ile
 I

<211> 323 <212> PRT

<213> Mus musculus

```
Thr Ile Pro Lys Thr Leu Cys Ile Phe Trp Phe His Leu Lys Glu Ile
               85
                                    90
Gly Phe Asp Asp Cys Leu Val Gln Met Phe Phe Ile His Thr Phe Thr
                               105
Gly Met Glu Ser Gly Val Leu Met Leu Met Ala Leu Asp Arg Tyr Val
                            120
Ala Ile Cys Tyr Pro Leu Arg Tyr Ser Thr Ile Leu Thr Asn Pro Ile
                       135
Ile Ala Lys Ile Gly Leu Ala Thr Phe Leu Arg Gly Val Leu Leu Ile
                   150
                                       155
Ile Pro Phe Thr Phe Leu Thr Lys Arg Leu Pro Tyr Cys Arg Gly Asn
               165
                                    170
Ile Ile Asn His Thr Tyr Cys Asp His Met Ser Val Ala Lys Leu Ser
           180
                               185
Cys Gly Asn Val Lys Val Asn Ala Ile Tyr Gly Leu Met Val Ala Leu
       195
                           200
Leu Ile Gly Gly Phe Asp Ile Leu Cys Ile Thr Ile Ser Tyr Thr Met
                        215
                                            220
Ile Leu Arg Ala Val Val Ser Leu Ser Ser Ala Asp Ala Arg Gln Lys
                    230
Ala Phe Ser Thr Cys Thr Ala His Ile Cys Ala Ile Val Phe Ser Tyr
                                    250
               245
Ser Pro Ala Phe Phe Ser Phe Phe Ser His Arg Phe Gly Gly His Thr
                               265
Ile Pro Pro Ser Cys His Ile Ile Val Ala Asn Ile Tyr Leu Leu
                           280
                                                285
Pro Pro Thr Met Asn Pro Val Val Tyr Gly Val Lys Thr Lys Gln Ile
                       295
Arg Asp Cys Val Ile Arg Ile Leu Ser Gly Ser Lys Asp Ser Lys Ala
305
                    310
His Gly Ile
```

<210> 1376 <211> 318

<212> PRT

<213> Mus musculus

<400> 1376

Met Pro Ile Met Ala Thr Phe Asn Leu Ser Ser Phe Asn Pro Gly Phe 10 Phe Ile Leu Gly Ile Pro Gly Leu Glu Gln Phe His Val Trp Ile 20 25 Gly Ile Pro Phe Phe Ile Ile Tyr Leu Val Ala Phe Ala Gly Asn Ser 40 Ile Leu Leu Tyr Leu Ile Phe Met Glu Arg Ser Leu His Glu Pro Met 55 Phe Phe Leu Ser Leu Leu Asp Gly Thr Asp Leu Ile Leu Cys Asn 75 Thr Cys Val Pro Lys Thr Phe Ser Ile Phe Trp Leu Gly Pro Gln His 85 90 Ile Thr Phe Pro Gly Cys Leu Thr Gln Met Phe Phe Leu His Phe Ser 105 Phe Ala Met Asp Ser Ala Ile Leu Leu Ser Met Ala Phe Asp Arg Tyr 115 120 Val Ala Ile Cys Phe Pro Leu Arg Tyr Thr Thr Ile Leu Thr His Gln

```
130
                      135
Ile Val Ile Lys Ile Val Val Ala Ile Ile Ser Arg Ser Phe Cys Ile
         150
                               155
Ile Phe Pro Cys Val Phe Leu Leu Lys Arg Leu Pro Phe Cys Arg Glu
                                   170
               165
Leu Val Ile Pro His Thr Tyr Cys Glu His Ile Gly Ile Ala Arg Leu
                               185
Ala Cys Ala Asp Ile Ser Ile Asn Ile Trp Tyr Gly Phe Ala Val Pro
                           200
                                              205
Ile Met Thr Val Met Ser Asp Leu Ile Leu Ile Gly Ile Ser Tyr Thr
                       215
                                          220
Val Ile Leu Arg Ala Val Phe Asn Leu Pro Ser Gln Asp Ala Arg Lys
               230
                                      235
Lys Ala Leu Ser Thr Cys Gly Ser His Val Cys Val Ile Leu Ile Phe
                                  250
               245
Tyr Thr Pro Ala Ile Phe Ser Val Leu Val His Arg Phe Gly His Asn
                              265
Ile Pro His Ser Phe His Ile Leu Phe Ala Asn Leu Tyr Val Ser Ile
                           280
                                              285
Pro Pro Ala Ile Asn Pro Val Ile Tyr Gly Val Lys Thr Lys Gln Ile
                       295
Arg Asp Lys Ile Asn Leu Leu Phe Phe Pro Lys Asp Asn His
                   310
                                       315
```

<211> 318

<212> PRT

<213> Mus musculus

<400> 1377

Met Thr Met Ser Ser Asn His Thr Asn Leu Arg Asp Ile Trp Tyr Thr 10 Met Ile Gly Ile Pro Gly Leu Glu Asp Ala His Val Trp Leu Ser Ile 25 Pro Ile Cys Ser Met Tyr Ile Val Ala Leu Ile Gly Asn Thr Leu Leu 40 Ile Phe Leu Ile Phe Thr Glu His Ser Leu His Glu Pro Met Tyr Leu 55 Phe Leu Ser Met Leu Ala Leu Ala Asp Ile Ile Leu Ser Thr Val Thr 75 70 Thr Pro Lys Val Leu Ala Ile Phe Trp Phe Gln Ala Gly Gly Ile Ser 90 Phe Thr Ser Cys Val Ser Gln Met Phe Phe Leu His Phe Met Phe Val 100 105 Thr Glu Ser Ala Ile Leu Leu Ala Met Ala Ile Asp Arg Tyr Ile Ala 120 Ile Cys Phe Pro Leu Arg Tyr Thr Thr Ile Leu Thr Pro Ser Val Ile 135 Cys Arg Met Gly Ile Ala Ser Val Thr Arg Ser Phe Leu Ile Ile Phe 150 155 Pro Leu Val Phe Leu Val Tyr Arg Leu Asn Tyr Cys Gly Arg Asn Ile 170 Ile Arg His Ser Tyr Cys Glu His Met Gly Ile Ala Arg Leu Ala Cys 180 185 Asp Ser Ile Lys Val Asn Ile Tyr Tyr Gly Met Thr Val Pro Leu Phe

Ser Ile Gly Leu Asp Ile Met Leu Ile Ile Ile Ser Tyr Thr Leu Ile 215 220 Leu His Thr Val Phe Arg Ile Pro Ser Gln Asn Ala Arg Arg Lys Ala 230 235 Leu Gly Thr Cys Gly Ser His Val Cys Val Ile Leu Leu Phe Tyr Thr 245 250 Pro Ser Leu Phe Thr Phe Phe Ala His Arg Phe Gly Gly His Thr Ile 265 Pro Arg His Met His Ile Leu Phe Ala Asn Leu Tyr Val Val Val Pro 280 Pro Ala Leu Asn Pro Ile Ile Tyr Gly Val Lys Thr Lys Gln Ile Gln 295 Asp Arg Phe Phe Gln Leu Phe Ser Phe Thr Lys Ala Cys Phe 310

<210> 1378 <211> 314 <212> PRT

<213> Mus musculus

<400> 1378

Met Pro Ser Cys Asn Asn Ser Ile Pro Gln Pro Leu Ile Phe Ile Leu Ala Gly Ile Pro Gly Leu Glu Ser Ser His Gly Trp Phe Ser Ile Ser 25 Phe Phe Leu Ile Phe Val Val Thr Ile Ile Gly Asn Val Thr Ile Leu 40 His Ile Ile Trp Ile Glu Lys Thr Leu His Glu Pro Met Phe Leu Leu 55 Leu Ala Thr Leu Ser Val Val Asp Leu Cys Leu Val Thr Val Thr Val 70 75 Pro Arg Met Leu Gly Ile Phe Trp Leu Asn Ala Lys Glu Ile Ser Leu 90 85 Glu Ala Cys Leu Thr Gln Met Phe Phe Ile Pro Ser Phe Tyr Val Met 100 105 110 Glu Ser Gly Ile Leu Leu Ala Met Ala Phe Asp Arg Phe Ala Ala Ile 120 125 Trp Tyr Pro Leu Arg Tyr Thr Thr Ile Leu Asp Ser Asn Met Leu Val 135 140 Lys Met Ala Leu Ala Ile Leu Ala Arg Ala Val Ala Val Val Thr Pro 150 155 Ala Pro Ile Leu Thr Lys Arg Leu Glu Arg Phe Gln Thr Gln Val Ile 165 170 Ser Tyr Ser Tyr Cys Ala Tyr Met Ala Val Val Met Ile Ala Cys Gly 185 Asp Ile Ser Asn His Ile Val Tyr Gly Leu Met Val Ile Val Ala Ser 200 Val Gly Ile Asp Leu Phe Leu Val Ile Leu Ser Tyr Thr Leu Ile Leu 215 220 Arg Ala Val Phe His Ile Pro Ser Trp Gln Ala Arg Ser Lys Ala Leu 230 235 Ser Thr Cys Gly Ser His Leu Cys Val Ile Gly Leu Phe Tyr Ser Pro 245 250 Val Val Phe Ser Val Leu Ser Gln Ile Leu Gly Tyr His Met Ala Pro 265 Tyr Leu Gln Ile Ile Ile Asp Asn Leu Tyr Phe Leu Val Pro Pro Met

<210> 1379 <211> 319 <212> PRT <213> Mus musculus

<400> 1379

Met Ile Arg Arg Gln His Met Glu Ala Gln Ser Asn Thr Ser Ser Ile 10 5 Leu Ala Pro Asp Phe Leu Leu Ile Cys Phe Pro Asn Tyr Gln Thr Trp 25 Gln His Trp Leu Ser Leu Pro Leu Ser Leu Leu Phe Leu Leu Ala Met 40 Gly Ala Asn Ala Thr Leu Leu Ile Thr Ile Arg Met Glu Ala Ser Leu 55 His Glu Pro Met Tyr Tyr Leu Leu Ser Leu Leu Ser Leu Leu Asp Ile 70 75 Val Leu Cys Leu Thr Val Ile Pro Lys Val Leu Ala Ile Phe Trp Phe 90 Asp Asn Lys Ser Ile Gly Phe Ser Ser Cys Phe Leu Gln Met Phe Val 105 Met Asn Ser Phe Leu Thr Met Glu Ser Cys Thr Phe Met Val Met Ala 120 125 Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Gln Tyr Pro Ser Ile 135 Ile Thr Asp Gln Phe Val Val Arg Ala Ile Phe Val Ala Arg 150 155 Asn Gly Ile Leu Thr Met Pro Ile Pro Ile Leu Ser Ser Gln Leu Arg 165 170 Tyr Cys Ala Arg Ile Ile Arg Asn Cys Ile Cys Thr Asn Met Ser Val 185 Ser Lys Leu Ser Cys Asp Asp Ile Thr Phe Asn Lys Leu Tyr Gln Phe 200 Val Ile Gly Trp Thr Leu Leu Gly Ser Asp Leu Ile Leu Ile Val Leu 215 220 Ser Tyr Ser Phe Ile Leu Lys Ala Val Leu Arg Ile Lys Ala Glu Gly 230 235 Ala Val Ala Lys Ala Leu Ser Thr Cys Gly Ser His Phe Ile Leu Ile 250 Leu Phe Phe Ser Thr Val Leu Leu Val Leu Val Ile Thr Asn Leu Ala 260 265 Arg Glu Arg Ile Pro Pro Asp Val Pro Ile Leu Leu Asn Ile Leu His 280 His Leu Ile Pro Pro Ala Leu Asn Pro Ile Val Tyr Gly Val Arg Thr 295 300 Arg Glu Ile Lys Gln Gly Ile Arg Asn Leu Leu Arg Arg Leu 310

<400> 1380 Met Thr Ala His Lys Asn Asp Thr Asn Pro Thr Gly Val Ser Asp Phe Leu Leu Asn Cys Phe Val Arg Ser Pro Ser Trp Gln Leu Trp Leu Ser 25 Leu Pro Leu Ser Leu Leu Phe Leu Leu Ala Met Gly Ala Asn Ala Ile 40 Leu Leu Ile Thr Ile Arg Met Glu Ala Ser Leu His Glu Pro Met Tyr 55 Tyr Leu Leu Ser Leu Leu Ser Met Leu Asp Ile Ile Leu Cys Leu Thr 75 70 Val Ile Pro Lys Val Leu Ala Ile Phe Trp Phe Asp Leu Arg Ala Ile 90 Gly Phe Pro Ala Cys Phe Leu Gln Met Tyr Ile Met Asn Ser Phe Leu 100 105 Ala Met Glu Ser Cys Thr Phe Met Ile Met Ala Phe Asp Arg Tyr Ile 120 Ala Ile Cys His Pro Leu Arg Tyr Pro Ser Ile Ile Thr Asp Gln Phe 135 140 Val Val Lys Ala Ala Thr Phe Ile Leu Val Arg Asn Val Leu Ile Thr 150 155 Leu Pro Ile Pro Ile Leu Ser Ala Arg Leu His Tyr Cys Gly Arg Asn 165 170 Val Ile Glu Asn Cys Ile Cys Ala Asn Met Ser Val Ser Arg Leu Ser 185 180 190 Cys Asn Asp Val Asn Val Asn Arg Leu Tyr Gln Phe Ala Ile Gly Trp 200 205 Thr Leu Leu Gly Ser Asp Leu Phe Leu Ile Phe Leu Ser Tyr Thr Leu 215 Ile Leu Arg Ala Val Leu Arg Leu Lys Ala Glu Gly Ala Val Ala Lys Ala Leu Ser Thr Cys Gly Ser His Phe Ile Leu Ile Leu Phe Phe Ser 245 250 Thr Ile Leu Val Phe Ile Leu Thr His Val Ala Lys Arg Lys Val 265 Ser Ser Asp Val Pro Ile Leu Leu Asn Val Leu His His Val Ile Pro 275 280 285 Ala Ala Leu Asn Pro Ile Val Tyr Gly Val Arg Thr Gln Glu Ile Lys 295 Gln Gly Ile Lys Lys Leu Leu Lys Lys Gly Trp 310

<210> 1381 <211> 317

<212> PRT

<213> Mus musculus

<400> 1381

 Met
 Leu
 Ile
 Ser
 Asn
 Ser
 Tyr
 Glu
 Ala
 Pro
 Gln
 Ser
 Phe
 Ile
 Leu

 1
 5
 5
 10
 10
 15
 15

 Asn
 Gly
 Ile
 Pro
 Gly
 Leu
 Glu
 Ala
 Val
 His
 Ile
 Trp
 Ile
 Ser
 Leu
 Pro

 20
 25
 30
 30
 30
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10</

```
35
                            40
Tyr Leu Ile Tyr Tyr Glu Glu Ser Leu His Arg Pro Met Tyr Phe Phe
                       55
Leu Ala Met Leu Ser Leu Ile Asp Leu Phe Thr Cys Thr Thr Val
Pro Asn Ala Leu Phe Ile Phe Trp Phe Lys Leu Lys Glu Ile Asn Phe
                85
                                    90
Thr Ala Cys Leu Val Gln Met Phe Phe Val His Gly Phe Thr Gly Val
                               105
Glu Ser Gly Val Leu Met Leu Met Ala Leu Asp Arg Tyr Val Ala Ile
                           120
       115
                                                125
Cys Tyr Pro Leu Arg Tyr Ala Thr Ile Leu Thr Asn Pro Val Ile Ala
                       135
                                           140
Lys Ala Gly Leu Ala Thr Phe Leu Arg Gly Val Leu Leu Met Ile Pro
                   150
                                       155
Phe Pro Phe Leu Val Lys Arg Leu Pro Phe Cys Arg Ser Asn Val Ile
                165
                                    170
Ser His Thr Tyr Cys Asp His Met Ser Val Val Lys Leu Ser Cys Ala
            180
                                185
Ser Ile Lys Ile Asn Val Ile Tyr Gly Leu Met Val Ala Leu Leu Ile
                            200
        195
                                                205
Gly Val Phe Asp Ile Cys Cys Ile Ser Val Ser Tyr Thr Met Ile Leu
                       215
                                            220
Arg Ala Val Val Ser Leu Ser Ser Ala Asp Ala Arg Gln Lys Ala Phe
                    230
                                        235
Ser Thr Cys Thr Ala His Ile Ser Ala Ile Ile Ile Thr Tyr Val Pro
                245
                                    250
Ala Phe Phe Thr Phe Phe Thr His Arg Phe Gly Gly His Thr Ile Pro
           260
                                265
Pro Ser Leu His Ile Ile Val Ala Asn Leu Tyr Leu Leu Pro Pro
                            280
Thr Leu Asn Pro Ile Val Tyr Gly Met Lys Thr Lys Gin Ile Arg Asp
                        295
Ser Ile Ile Lys Phe Phe His Gly Glu Lys Gly Ser Arg
                    310
```

<210> 1382 <211> 309

<212> PRT

<213> Mus musculus

<400> 1382

 Met
 Asp
 Ser
 Asn
 Arg
 Thr
 Arg
 Val
 Ala
 Glu
 Phe
 Leu
 Leu
 Leu
 Gly

 Phe
 Leu
 Glu
 Asn
 Lys
 Asp
 Leu
 Gln
 Pro
 Ile
 Ile
 Tyr
 Gly
 Leu
 Phe
 Leu

 Ser
 Met
 Tyr
 Leu
 Val
 Thr
 Val
 Val
 Gly
 Asn
 Met
 Leu
 Ile
 Ile

```
Phe Leu Leu Thr Ile Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                           120
Pro Met Arg Tyr Thr Val Ile Met Asn Tyr Gln Leu Cys Gly Phe Leu
                       135
Val Leu Val Ser Trp Ile Val Ser Val Leu His Ala Leu Phe Gln Ser
                                        155
Leu Met Met Leu Glu Leu Pro Phe Cys Thr Gln Pro Glu Ile Pro His
                                    170
               165
Phe Phe Cys Glu Pro Asn Gln Val Ile Gln Leu Thr Cys Ser Asp Ala
                               185
Phe Leu Asn Asp Met Val Ile Tyr Phe Thr Leu Val Leu Leu Ala Ile
                           200
                                                205
Val Pro Leu Ala Gly Val Phe Tyr Ser Tyr Phe Lys Ile Val Ser Ser
                       215
                                            220
Ile Arg Ala Met Ser Ser Val His Gly Lys Tyr Lys Ala Phe Ser Thr
                    230
                                       235
Cys Ala Ser His Leu Leu Val Val Ser Leu Phe Tyr Cys Thr Gly Leu
                                    250
                245
Gly Val Tyr Leu Ser Ser Ala Ala Asn His Gly Ser Gln Thr Ser Ala
                                265
Thr Ala Ser Val Thr Tyr Thr Val Val Thr Pro Met Met Asn Pro Phe
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ser Ala Leu Lys Arg Leu
                       295
Phe Val Arg Lys Leu
305
```

<211> 319

<212> PRT

<213> Mus musculus

<400> 1383

Met Glu Thr Gly Asn Asp Thr Gln Leu Ser Glu Phe Phe Leu Leu Gly 10 Phe Ser Glu Asn Gln Pro Gln Ile Gln Pro Val Ile Phe Gly Leu Phe 25 Leu Phe Met Tyr Ile Leu Thr Phe Thr Gly Asn Leu Leu Ile Ile Met 40 Ala Ile Ile Val Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu 55 Ser Asn Leu Ser Phe Val Asp Ile Cys Phe Thr Ser Thr Thr Val Pro 70 75 Gln Met Leu Val Asn Ile His Thr Gln Ser Lys Ala Ile Thr Tyr Ala 90 Gly Cys Ile Ile Gln Met Tyr Phe Leu Leu Leu Phe Ser Gly Leu Asp 100 105 Ile Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys 120 125 His Pro Leu His Tyr Met Ile Ile Met Ser Thr Arg Arg Cys Gly Leu 135 140 Met Ile Leu Ala Cys Trp Ile Ile Gly Val Ile Asn Ser Leu Leu His 150 155 Thr Phe Leu Val Leu Arg Leu Ser Phe Cys Thr Asn Leu Glu Ile Pro 170 His Phe Phe Cys Glu Leu Asn Gln Val Val His Gln Ala Cys Ser Asp

180 185 Thr Phe Leu Asn Asp Met Val Ile Tyr Ile Thr Ala Met Leu Leu Ala 200 205 Val Gly Pro Phe Ser Gly Ile Leu Tyr Ser Tyr Ser Arg Ile Val Ser 215 Ser Ile Cys Ala Ile Ser Ser Val Gln Gly Lys Tyr Lys Ala Phe Ser 235 Thr Cys Ala Ser His Leu Ser Val Val Ser Leu Phe Tyr Cys Thr Leu 250 245 Leu Gly Val Tyr Leu Ser Ser Ala Val Thr Gln Asn Ser His Ala Thr 265 Ala Thr Ala Ser Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro 280 285 Phe Ile Tyr Ser Leu Arg Asn Lys Asp Ile Lys Thr Ala Leu Lys Ile 295 300 Leu Leu Gly Ser Val Thr Arg Ser Arg Ser Met Asp Ser Pro Ser

<210> 1384

<211> 319

<212> PRT

<213> Mus musculus

<400> 1384

Met Glu Pro Gly Asn Asp Thr Gln Leu Ser Glu Phe Phe Leu Leu Glu 10 Leu Ser Glu Asn Gln Pro Gln Ile Gln Pro Leu Ile Phe Gly Leu Phe 25 Leu Ser Met Tyr Leu Val Thr Val Thr Gly Asn Leu Leu Ile Ile Met 40 Ala Ile Thr Ala Asp Ser His Leu His Thr Pro Met Tyr Ile Phe Leu 55 Ser Asn Leu Ser Phe Val Asp Ile Cys Phe Thr Ser Thr Thr Val Pro Gln Met Leu Val Thr Ile His Thr Gln Ser Lys Ala Ile Thr Tyr Ala 90 8.5 Asn Cys Ile Thr Gln Val Tyr Phe Leu Leu Phe Ser Val Leu Asp 105 Ile Phe Leu Leu Thr Val Met Ala Tyr Asp His Tyr Val Ala Ile Cys 120 125 His Pro Leu His Tyr Met Ile Ile Met Asn Thr Arg Arg Cys Gly Leu 135 Met Ile Leu Ala Cys Trp Ile Ile Gly Val Ile Asn Ser Leu Leu His 150 155 Thr Phe Leu Ala Leu Arg Leu Ser Phe Cys Thr Asp Leu Glu Ile Pro 170 His Phe Tyr Cys Glu Leu Asn Gln Val Val His His Ala Cys Ser Asp 180 185 Ile Ser Leu Asn Asp Met Val Ile Tyr Ile Ala Ala Met Leu Leu Val 200 Val Gly Pro Leu Ser Gly Ile Leu Tyr Ser Tyr Ser Lys Ile Val Ser 215 Ser Ile Cys Ala Ile Ser Ser Val Gln Gly Lys Tyr Lys Ala Phe Ser 230 235 Thr Cys Ala Ser His Leu Ser Val Val Ser Leu Phe Tyr Cys Thr Leu 250

Leu Gly Val Tyr Leu Ser Ser Ala Val Thr Gln Asn Ala Gln Ala Thr 260

Ala Leu Ala Ser Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro 275

Phe Ile Tyr Ser Leu Arg Asn Asn Asp Met Lys Lys Ala Leu Lys Ile 290

Val Leu Gly Arg Val Thr Arg Asn Arg Leu Thr Asp Leu Pro Ser 305

<210> 1385
<211> 312
<212> PRT
<213> Mus musculus

<212> PRT <213> Mus musculus <400> 1385 Met Arg Gly Glu Asn Ile Thr Lys Val Ser Thr Phe Ile Leu Leu Gly 10 Phe Pro Thr Ala Pro Glu Leu Gln Tyr Leu Leu Phe Leu Leu Phe Leu 25 Leu Ala Tyr Leu Phe Val Leu Val Glu Asn Leu Ala Ile Ile Leu Thr 40 Val Trp Ser Ser Ala Ser Leu His Arg Pro Met Tyr Tyr Phe Leu Gly 55 Ile Met Ser Thr Leu Glu Ile Trp Tyr Val Cys Asp Ile Ile Pro Lys 75 70 Met Leu Asp Gly Phe Leu Leu Gln Arg Lys Arg Ile Ser Phe Ile Gly 90 Cys Met Thr Gln Leu Tyr Phe Phe Ser Ser Leu Val Cys Thr Glu Cys 105 100 Val Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 Pro Leu Arg Tyr Gln Val Ile Met Thr Thr Gly Leu Cys Val Gln Leu 135 Val Ala Phe Ser Phe Ala Ser Gly Phe Ser Ile Ser Val Ile Lys Val 150 155 Tyr Phe Ile Ser Ser Ala Thr Phe Cys Gly Ser Asn Val Leu Asn His 165 170 Phe Phe Cys Asp Ile Ser Pro Ile Leu Lys Leu Ala Cys Thr Asp Phe 185 180 Ser Thr Ala Glu Leu Val Asp Phe Ile Leu Ala Phe Ile Ile Leu Val 200 Phe Pro Leu Leu Ala Thr Val Leu Ser Tyr Gly His Ile Thr Leu Ala 215 220 Val Leu Arg Ile Pro Ser Ala Thr Gly Arg Trp Arg Ala Phe Ser Thr 230 235 Cys Ala Ser His Leu Thr Val Val Thr Ile Phe Tyr Thr Ala Leu Leu 245 250 Phe Met Tyr Val Arg Pro Gln Ala Ile Asp Thr Arg Ser Ser Asn Lys 265 Leu Ile Ser Val Leu Tyr Thr Val Leu Thr Pro Ile Leu Asn Pro Leu 280 285 Ile Tyr Cys Leu Arg Asn Lys Glu Phe Lys Asp Ala Leu Arg Lys Ala 295 300

Leu Gly Leu Gly Gln Ala Pro Leu

305

```
<212> PRT
<213> Mus musculus
<400> 1386
Met Arg Gly Glu Asn Ile Thr Lys Val Ser Thr Phe Ile Leu Leu Gly
                                   1.0
Phe Pro Thr Ala Pro Glu Leu Gln Tyr Leu Leu Phe Leu Phe Leu
                               25
Leu Ala Tyr Leu Phe Val Leu Val Glu Asn Leu Thr Ile Ile Leu Thr
                           40
Val Trp Ser Ser Ala Ser Leu His Arg Pro Met Tyr Tyr Phe Leu Gly
                       55
Ser Leu Ser Phe Leu Glu Ile Trp Tyr Val Ser Asp Ile Ile Pro Lys
                   70
                                       75
Met Leu Asp Gly Phe Leu Leu Gln Arg Lys Arg Ile Ser Phe Ile Gly
                                   90
               85
Cys Met Thr Gln Leu Tyr Phe Phe Ser Ser Leu Val Cys Thr Glu Cys
                               105
Val Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                          120
Pro Leu Arg Tyr Gln Val Ile Met Thr Thr Gly Leu Cys Val Gln Leu
                       135
Val Ala Phe Ser Phe Ala Ser Gly Phe Thr Ile Ser Val Ile Lys Val
                                       155
                   150
Tyr Phe Ile Ser Ser Ala Thr Phe Cys Gly Ser Asn Val Leu Asn His
                                   170
               165
Phe Phe Cys Asp Ile Ser Pro Ile Leu Lys Leu Ala Cys Thr Asp Phe
                               185
                                                  190
           180
Ser Thr Ala Glu Leu Val Asp Phe Ile Leu Ala Phe Ile Ile Leu Val
                           200
Phe Pro Leu Leu Ala Thr Ile Leu Ser Tyr Gly His Ile Thr Leu Ala
                       215
Val Leu Arg Ile Pro Ser Ala Thr Gly Arg Trp Arg Ala Phe Ser Thr
                   230
                                       235
Cys Ala Ser His Leu Thr Val Val Thr Phe Phe Tyr Met Ala Met Ile
               245
                                   250
Phe Met Tyr Val Arg Pro Gln Ala Ile Asp Thr Arg Ser Ser Asn Lys
                               265
           260
Leu Ile Ser Ala Val Tyr Thr Val Leu Thr Pro Met Met Asn Pro Leu
                           280
Ile Tyr Cys Leu Arg Asn Thr Glu Phe Lys Asp Ala Val Arg Arg Thr
                       295
                                           300
Leu Gly Leu Gly Asn Thr Pro Gln
<210> 1387
<211> 323
<212> PRT
<213> Mus musculus
<400> 1387
Met Ala Thr Gln Val His Arg Asn Gly Ser Leu Ser Ala Val Ser Leu
```

<210> 1386 <211> 312

```
Gln Gly Phe Val Leu Val Gly Phe Gly Gly Gly Ala Lys Thr Gln Ala
                                25
Leu Leu Phe Ala Val Phe Leu Thr Leu Tyr Val Val Thr Val Leu Gly
                            40
Asn Leu Thr Met Ile Val Val Ile Thr Leu Asp Ala Arg Leu His Ser
Pro Met Tyr Phe Phe Leu Lys Asn Leu Ser Phe Val Asp Phe Cys Tyr
                   70
                                        7.5
Ser Ser Val Ile Ala Pro Lys Ala Met Thr Ile Phe Leu Ser Ser Ser
Lys Val Ile Ser Phe Ala Gly Cys Ala Thr Gln Phe Phe Phe Ser
                               105
           100
Leu Leu Val Thr Thr Glu Gly Phe Leu Leu Ala Val Met Ala Tyr Asp
       115
                           120
                                                125
Arg Phe Met Ala Ile Cys Ser Pro Leu Arg Tyr Pro Val Thr Met Cys
   130
                       135
                                           140
Pro Met Ala Cys Ala Arg Leu Val Leu Gly Thr Tyr Cys Gly Gly Cys
                    150
                                        155
Leu Asn Ser Ile Val Gln Thr Ser Leu Thr Phe Gln Leu Pro Phe Cys
                                    170
Ser Ser Asn Arg Ile Asp His Phe Tyr Cys Asp Val Pro Pro Leu Leu
                                185
                                                    190
Gln Leu Ala Cys Ala Asp Thr Thr Leu Asn Glu Phe Val Met Phe Gly
                            200
Ile Cys Gly Leu Ile Ile Val Ser Thr Thr Leu Val Val Leu Ile Ser
                       215
                                            220
Tyr Gly Tyr Ile Thr Met Thr Ile Leu Arg Met Arg Ser Gly Ser Gly
                    230
                                        235
Arg His Lys Val Phe Ser Thr Cys Gly Ser His Met Thr Ala Val Ser
                                    250
               245
Leu Phe Tyr Gly Thr Val Phe Val Met Tyr Ala Gln Pro Gly Ala Leu
                               265
Thr Ser Met Glu Gln Gly Lys Val Val Ser Val Phe Tyr Thr Leu Val
       275
                            280
Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val
                        295
Lys Asp Ala Pro Arg Arg Leu Gly Gln Arg His Ser Leu Val Lys Glu
                    310
                                        315
Asp Val Gln
```

```
<210> 1388
<211> 309
<212> PRT
```

<213> Mus musculus

<400> 1388

 Met
 Arg
 Asn
 His
 Ser
 Thr
 Val
 Pro
 Glu
 Phe
 Ile
 Leu
 Leu
 Gly
 Leu
 Ser
 10
 10
 15
 15
 15
 15
 15
 15
 16
 16
 15
 15
 15
 15
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 1

```
75
Glu Asn Leu Leu Ser Val Lys Lys Thr Ile Ser Val Glu Gly Cys Leu
               85
                                    90
Ala Gln Val Phe Phe Val Phe Ala Thr Gly Gly Thr Glu Ser Cys Leu
                                105
Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser Ser Pro Leu
                            120
Leu Tyr Gly Gln Val Met Ser Arg Gln Leu Cys Ala Gly Leu Val Trp
                       135
Gly Ser Trp Ser Leu Ala Phe Leu Asp Ala Phe Ile Asn Ile Leu Val
                   150
                                       155
Ala Leu Asn Leu Asp Phe Cys Glu Ala Gln Asn Ile His His Phe Ile
               165
                                   170
Cys Glu Leu Pro Ser Leu Tyr Pro Leu Ser Cys Ser Asp Val Ser Ala
           180
                               185
Ser Phe Thr Thr Leu Leu Cys Ser Ser Phe Ile His Phe Phe Gly Asn
                           200
Phe Leu Leu Ile Leu Leu Ser Tyr Ile Arg Ile Leu Leu Thr Ile Leu
                        215
Gly Ile Ser Ser Ala Ser Gly Arg Ser Lys Ala Phe Ser Thr Cys Ser
                    230
Ser His Leu Thr Ala Val Ser Phe Phe Tyr Gly Ser Gly Leu Leu Arg
                245
                                    250
Tyr Leu Met Pro Asn Ser Gly Ser Thr Gln Glu Leu Ile Phe Ser Leu
                               265
Gln Tyr Ser Val Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu
                            280
                                                285
Lys Asn Lys Glu Val Lys Ala Ala Val Arg Arg Thr Val Thr Lys Tyr
                       295
Leu Gln Cys Phe Lys
305
```

65

<211> 314

<212> PRT

<213> Mus musculus

<400> 1389

Met Leu Asp Met Asn Ile Thr Leu Val Ser Glu Phe Ile Leu Val Gly 10 Phe Pro Thr Ala Pro Trp Leu Gln Ile Leu Leu Phe Phe Ile Phe Leu 25 Val Val Tyr Met Leu Ile Ile Ala Glu Asn Leu Val Ile Ile Phe Thr 40 Val Trp Ser Thr Gly Ser Leu His Lys Pro Met Tyr Tyr Phe Leu Ser 55 Ser Met Ser Phe Leu Glu Ile Trp Tyr Val Ser Val Thr Val Pro Lys 75 Met Leu Asp Gly Phe Leu Leu Gln Arg Arg His Ile Ser Phe Thr Gly 90 Cys Met Thr Gln Leu Tyr Phe Phe Ile Ser Leu Ala Cys Thr Glu Cys 100 105 Val Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 125 Pro Leu Arg Tyr Pro Val Ile Met Thr Thr Val Tyr Cys Met Gln Leu 135

```
Met Ala Leu Ser Tyr Phe Ser Gly Phe Met Val Ser Val Val Lys Val
                   150
                                      155
Tyr Phe Ile Ser His Val Ala Phe Cys Gly Ser Asn Val Met Asn His
                                   170
               165
Phe Phe Cys Asp Ile Ser Pro Ile Leu Lys Leu Ala Cys Lys Asp Met
           180
                               185
Ser Thr Ala Glu Leu Val Asp Phe Ala Leu Ala Ile Val Ile Leu Val
                          200
Phe Pro Leu Ile Thr Thr Val Leu Ser Tyr Val Tyr Ile Val Ser Thr
                       215
                                           220
Ile Leu His Ile Pro Ser Thr Gln Gly Arg Lys Lys Ala Phe Ser Thr
     230
                                       235
Cys Ala Ser His Leu Thr Val Val Ile Ile Tyr Tyr Thr Ala Met Ile
                                   250
               245
Phe Met Tyr Val Arg Pro Arg Ala Ile Ala Ser Phe Asn Ser Asn Lys
                              265
Leu Ile Ser Ala Val Tyr Ala Val Leu Thr Pro Met Leu Asn Pro Phe
                           280
                                               285
Ile Tyr Cys Leu Arg Asn Arg Glu Val Lys Asp Ala Ile Lys Lys Thr
                       295
Leu Gly Gly Gln Cys Phe Leu Leu Cys
                   310
```

<210> 1390 <211> 324 <212> PRT

<213> Mus musculus

<400> 1390

Thr Glu Phe Ile Leu Met Ser Phe Ser Ser Leu Pro Thr Glu Ile Gln 25 Thr Leu Leu Phe Leu Ala Phe Leu Thr Ile Tyr Leu Val Thr Leu Leu 4.0 Gly Asn Ser Leu Ile Ile Leu Val Thr Leu Ala Asp Pro Met Leu Gln Ser Pro Met Tyr Phe Phe Leu Arg Asn Leu Ser Phe Leu Glu Ile Gly 70 7.5 Phe Asn Leu Val Ile Val Pro Lys Met Leu Gly Thr Leu Ile Ala Gln 85 90 Asp Thr Ser Ile Ser Phe Leu Gly Cys Ala Thr Gln Met Tyr Phe Phe 100 105 110 Phe Phe Gly Val Ala Glu Cys Phe Leu Leu Ala Thr Met Ala Tyr 120 Asp Arg Tyr Val Ala Ile Cys Ser Pro Leu His Tyr Pro Val Ile Met 135 140 Asn Gln Glu Thr Arg Val Lys Leu Ala Ala Ala Ser Trp Phe Pro Gly 150 155 Phe Pro Val Ala Thr Val Gln Thr Trp Leu Phe Ser Phe Pro Phe 170 Cys Ala Thr Asn Lys Val Asn His Phe Phe Cys Asp Ser Pro Pro Val 190 180 185 Leu Arg Leu Val Cys Ala Asp Thr Ala Gln Phe Glu Val Tyr Ala Ile 200 Val Gly Thr Ile Leu Val Val Met Ile Pro Cys Leu Leu Ile Leu Cys

Met Leu Phe Met Leu Ile Pro Met Ala Thr Gly Asn Gln Thr Arg Ile

220 210 215 Ser Tyr Thr Leu Ile Ala Ala Ser Ile Leu Lys Ile Pro Ser Ala Lys 230 235 Gly Lys His Lys Ala Phe Ser Thr Cys Ser Ser His Leu Leu Val Val 250 245 Ser Leu Phe Tyr Val Ser Ser Ser Leu Thr Tyr Phe Arg Pro Lys Ser 265 260 Asn Asn Ser Pro Glu Ser Lys Lys Leu Leu Ser Leu Ser Tyr Thr Val 280 Val Thr Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Asn Glu 295 300 Val Lys Ser Ala Leu Ser Arg Thr Phe His Lys Ala Leu Ala Leu Arg 310 Asn His Ile Thr

<210> 1391

<211> 317

<212> PRT

<213> Mus musculus

<400> 1391

Met Ala Ala Gly Asn Gln Thr Arg Ile Ala Glu Phe Ile Leu Met Gly 1.0 Phe Ser Ser Leu Pro Thr Glu Ile Gln Thr Leu Leu Phe Leu Ala Phe 25 Leu Thr Ile Tyr Leu Val Thr Leu Leu Gly Asn Ser Leu Ile Ile Leu 4.5 40 Val Thr Leu Ala Asp Pro Met Leu Gln Ser Pro Met Tyr Phe Phe Leu 55 Arg Asn Leu Ser Phe Met Glu Ile Gly Phe Asn Leu Val Ile Leu Pro 75 70 Lys Met Leu Arg Thr Leu Ile Ala Gln Asp Thr Ser Ile Ser Phe Leu 90 Gly Cys Ala Thr Gln Met Tyr Phe Phe Phe Phe Gly Val Ala Glu 100 105 Cys Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys 120 Ser Pro Leu His Tyr Pro Ile Ile Met Asn Gln Gly Thr His Ala Arg 135 140 Leu Ala Ala Ala Ser Trp Phe Pro Gly Phe Pro Val Ala Thr Val Gln 150 155 Thr Thr Trp Leu Phe Ser Phe Pro Phe Cys Ala Asn Asn Lys Val Asn 165 170 His Phe Phe Cys Asp Ser Pro Pro Val Leu Arg Leu Val Cys Ala Asp 185 180 Thr Ala Arg Phe Glu Val Tyr Ala Ile Val Gly Thr Ile Leu Val Val 195 200 Met Ile Pro Cys Leu Leu Ile Leu Cys Ser Tyr Thr Leu Ile Ala Ala 215 220 Ser Ile Leu Lys Ile Pro Ser Ala Lys Gly Lys His Lys Ala Phe Ser 230 235 Thr Cys Ser Ser His Leu Val Val Val Ser Leu Phe Tyr Val Ser Leu 245 250 Ser Leu Thr Tyr Phe Arg Pro Lys Ser Lys Asn Ser Pro Glu Ser Lys 260 265

1

<210> 1392 <211> 316 <212> PRT <213> Mus musculus

<400> 1392

Met Glu Pro Trp Asn Ser Thr Leu Gly Thr Asp Phe Asn Leu Val Gly 10 Ile Leu Asp Asp Ser Gly Ser Pro Glu Leu Leu Cys Ala Thr Phe Thr 20 25 Ala Leu Tyr Met Leu Ala Leu Ile Ser Asn Gly Leu Leu Ile Leu Val 40 Ile Thr Met Asp Ala Arg Leu His Val Pro Met Tyr Phe Leu Leu Gly 55 60 Gln Leu Ser Leu Met Asp Leu Leu Phe Thr Ser Val Val Thr Pro Lys Ala Val Ile Asp Phe Leu Leu Arg Asp Asn Thr Ile Ser Phe Glu Gly 85 90 Cys Ser Leu Gln Met Phe Leu Ala Leu Thr Leu Gly Gly Ala Glu Asp 105 Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 125 Pro Leu Asn Tyr Met Ile Phe Met Arg Pro Ser Ile Cys Trp Leu Met 135 Val Ala Thr Ser Trp Ile Leu Ala Ser Leu Met Ala Leu Gly Tyr Thr 150 155 Thr Tyr Thr Met Gln Tyr Ser Tyr Cys Lys Ser Arg Lys Ile Arg His 170 165 Leu Leu Cys Glu Ile Pro Pro Leu Leu Lys Leu Ala Cys Ala Asp Thr 180 185 Ser Lys Tyr Glu Leu Met Val Tyr Val Met Gly Val Thr Phe Leu Ile 200 205 Pro Pro Leu Ala Ala Ile Leu Ala Ser Tyr Ser Leu Ile Leu Phe Thr 215 220 Val Leu His Met Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Thr 230 235 Cys Ser Ser His Leu Thr Val Val Gly Met Phe Tyr Gly Ala Ala Thr 250 Phe Met Tyr Val Leu Pro Ser Ser Phe His Ser Pro Arg Gln Asp Asn 260 265 Ile Ile Ser Val Phe Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Leu Ile Arg Val 295 Leu Gly Arg Tyr Ile Val Pro Ala His Pro Thr Leu 310

```
<213> Mus musculus
<400> 1393
Met Glu Phe Val Leu Ser Ala Asp Lys Lys Glu Ile Lys Ser Lys Asn
Leu Asn Ile Ser Ile Thr Glu Phe Val Leu Leu Gly Phe Ser Asp Val
                               25
Pro Gln Leu Gln Trp Met Leu Phe Gly Ile Phe Leu Phe Met Tyr Leu
                           40
Ser Ile Leu Ile Ser Asn Ser Ile Ile Met Leu Ile Thr Arg Thr Asp
                       55
Ser Ala Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser Asn Phe Ser Phe
                   70
                                       75
Val Glu Ile Cys Tyr Val Thr Val Thr Ile Pro Arg Met Leu Met Asp
               85
                                  90
Leu Cys Thr Gln Lys Gly Thr Ile Ser Leu Leu Ser Cys Ala Val Gln
                               105
Leu Cys Phe Val Ile Met Leu Gly Gly Met Glu Phe Leu Leu Thr
                           120
Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu His Tyr
                      135
Pro Leu Val Met Asn Asn Lys Val Cys Val Gln Leu Val Ala Ala Cys
                                      155
Trp Ile Cys Ile Ile Pro Val Val Thr Gly Gln Thr Tyr Gln Ile Phe
               165
                                  170
Ser Leu Pro Tyr Cys Gly Ser Asn Lys Ile His His Phe Phe Cys Asp
                               185
Ile Pro Pro Leu Leu Lys Leu Ala Cys Gly Asp Thr Phe Val Asn Asn
                           200
                                              205
Leu Ala Ile Tyr Ile Ala Ser Val Val Phe Ile Met Val Pro Phe Leu
                       215
                                           220
Leu Ile Leu Val Ser Tyr Gly Lys Ile Ile Cys Asn Val Leu Lys Leu
                 - 230
                                       235
Ala Thr Ser Gly Gly Arg Ser Lys Ala Phe Ser Thr Cys Ser Ser His
                                   250
               245
Leu Ile Val Val Leu Phe Tyr Gly Thr Ala Thr Ile Thr Tyr Ala
                               265
Gln Pro Lys Ala Tyr Gln Ser Glu Thr Leu Gly Lys Leu Leu Ser Leu
                          280
                                              285
Phe Tyr Thr Ile Leu Ile Pro Leu Leu Asn Pro Ile Ile Tyr Thr Leu
                      295
                                          300
Arg Asn Lys Asp Ile Met Val Ala Leu Arg Lys Leu Gln Thr Lys Leu
                  310
                                      315
Ser Thr Tyr Gly Asn Thr
<210> 1394
<211> 312
<212> PRT
<213> Mus musculus
<400> 1394
Met Thr Phe Glu Asn Phe Thr Met Leu Thr Glu Phe Val Phe Leu Gly
```

<211> 326 <212> PRT

```
Leu Ser Gly Arg Gln Asp Val Gln Gln Gly Leu Phe Ala Leu Phe Phe
                                25
Leu Val Tyr Gly Ile Thr Val Ile Ala Asn Leu Gly Met Val Ile Leu
                            40
Ile Lys Leu Asp Ser Arg Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
Asn Leu Ser Phe Cys Asp Ile Cys Tyr Ser Ser Thr Val Ser Pro Lys
                                       75
                   70
Met Leu Ala Asp Phe Leu Ser Lys Glu Lys Arg Ile Pro Tyr Asn Leu
                                   90
Cys Ala Val Gln Met Tyr Phe Phe Gly Ala Phe Ala Asp Val Glu Cys
                               105
Leu Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                           120
                                                125
Pro Leu Leu Tyr Thr Ile Val Met Ser Lys Lys Leu Cys Ile Gln Leu
                       135
                                           140
Val Ala Val Ala Tyr Ala Ile Gly Leu Val Asp Ser Ala Ile His Thr
                   150
                                       155
Ser Cys Thr Phe Arg Leu Ser Phe Cys Asn Ser Asn Val Ile Asn His
               165
                                    170
Phe Phe Cys Asp Ile Pro Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr
           180
                               185
Ser Ile Asn Glu Ile Val Met Phe Thr Phe Ile Gly Cys Val Val Gly
                           200
Ile Ser Ile Val Thr Val Leu Leu Ser Tyr Cys Tyr Ile Ile Ala Thr
                    . 215
                                            220
Ile Cys Arg Met Asn Ser Ala Glu Gly Arg His Lys Ala Phe Ser Thr
                   230
                                        235
Cys Ala Ser His Leu Met Ala Val Ala Ile Phe His Gly Thr Leu Leu
                                   250
               245
Phe Met Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Met Asp Thr Asp Lys
                               265
Met Ala Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
       275
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Lys Lys Ala
                       295
Ile Asn Ile Asn Leu Trp Pro Gly
                    310
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1395

 Met
 Glu
 His
 Ser
 Glu
 Asn
 Ser
 Ala
 Met
 Asp
 Asn
 Ala
 Thr
 Ser
 Val
 Thr

 Gln
 Phe
 Leu
 Leu
 Gly
 Phe
 Ser
 Gly
 Val
 Pro
 Asn
 Leu
 Gln
 Thr
 Phe
 Asn
 Leu
 Gln
 Thr
 Phe
 Asn
 Leu
 Gln
 Thr
 Phe
 Asn
 Leu
 He
 Gln
 Asn
 Asn

```
90
               85
Gly Ile Cys Leu Leu Ala Cys Ala Ile Gln Met Phe Phe Leu Ile
                               105
Leu Ala Ala Thr Glu Cys Phe Leu Leu Ala Val Met Ser Tyr Asp Arg
                           120
Tyr Val Ala Ile Cys Asn Pro Leu His Tyr Pro Leu Val Met Asn Pro
                       135
                                           140
Thr Lys Cys Thr Gln Leu Ala Val Gly Ser Trp Leu Gly Gly Ile Pro
                   150
                                       155
Val Gln Ile Gly Gln Thr Cys Arg Ile Phe Ser Leu His Phe Cys Asn
                                   170
               165
Ser Asn Ile Ile Glu His Phe Phe Cys Asp Val Pro Pro Ile Leu Lys
                               185
                                                   190
Leu Ala Cys Gly Asp Thr Ser Met His Glu Leu Ser Val Tyr Leu Val
                           200
                                               205
Ala Met Phe Phe Val Ala Ser Pro Phe Met Leu Ile Leu Ala Ser Tyr
                       215
Ser Lys Ile Ile Ala Thr Ile Leu Lys Leu Pro Thr Ala Thr Gly Arg
                   230
                                       235
Ala Lys Ala Phe Ser Thr Cys Ser Ser His Leu Val Val Leu Leu
               245
                                   250
Phe Phe Gly Ser Ala Thr Ile Asn Tyr Leu Arg Pro Lys Ser Ile His
           260
                               265
Ser Val Gly Thr Asp Glu Leu Leu Ser Leu Phe Tyr Thr Ile Val Thr
                           280
                                               285
Pro Met Phe Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Ile
                       295
Ala Ala Leu Arg Arg Leu Leu Lys Ile
                   310
```

<211> 318

<212> PRT

<213> Mus musculus

<400> 1396

Met Asn His Gln Gln Lys Pro Gln Glu Gly Asn Leu Thr Asn Leu Lys 10 Glu Phe Val Leu Gly Phe Ser Asp Val Pro Asp Leu Gln Trp Val 25 Leu Phe Gly Leu Leu Ile Ala Met Tyr Cys Phe Ile Leu Leu Gly Asn 40 Gly Thr Ile Val Leu Ile Thr Asn Val Asp Ser Ala Leu Gln Thr Pro 55 Met Tyr Phe Phe Leu Gly Asn Phe Ser Phe Leu Glu Ile Cys Tyr Val 75 70 Ser Ile Thr Leu Pro Arg Met Val Phe Asn Leu Gly Thr Gln Arg Arg Thr Ile Ser Phe Ile Ala Cys Ala Thr Gln Met Cys Phe Thr Leu Ile 105 Leu Gly Ala Thr Glu Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg 120 Tyr Val Ala Ile Cys Asn Pro Leu His Tyr Pro Leu Val Met Asn Gln 135 140 Lys Val Cys Ser Gln Leu Val Ile Gly Ser Trp Ile Ser Gly Ile Pro 145 150 155

```
Ile Gln Ile Gly Gln Thr Ser His Ile Phe Ser Leu Ser Phe Cys Gly
               165
                                  170
Ser Asn Gln Ile Asn His Phe Phe Cys Asp Ile Pro Pro Ile Leu His
           180
                              185
Leu Ala Cys Gly Asp Ile Phe Ile Asn Glu Met Met Val Phe Leu Gly
                           200
Ala Phe Leu Phe Val Leu Phe Pro Phe Met Leu Ile Val Phe Ser Tyr
                       215
                                          220
Ser Lys Ile Ile Ser Thr Val Leu Lys Leu Ser Ser Thr Lys Ser Arg
                   230 " 235
Ala Lys Ala Phe Ser Thr Cys Ser Ser His Leu Ala Val Val Ile Leu
               245
                                  250
Phe Phe Gly Ser Ala Met Ile Thr Tyr Phe Arg Ser Asn Ala Ser His
                                   . 270
           260
                              265
Ser Gly Glu Thr Asp Lys Val Leu Ser Leu Phe Tyr Thr Val Val Thr
       275
                          280
                                              285
Pro Met Phe Asn Pro Met Val Tyr Ser Leu Arg Asn Lys Asp Val Thr
                      295
Ile Ala Leu Arg Lys Phe Leu Cys Lys Gln Phe Val Lys Ile
305
                   310
```

<211> 317

<212> PRT

<213> Mus musculus

<400> 1397

Met Glu Gly Asp Asn Thr Ser Ser Thr Asp Phe Thr Phe Met Gly Leu 10 Phe Asn Thr Glu Glu Thr Ser Gly Leu Val Phe Ala Thr Ile Ser Val 20 25 Ile Phe Leu Thr Ala Leu Val Ala Asn Gly Ile Met Ile Phe Leu Ile His Thr Asp Ala His Leu His Thr Pro Met Tyr Phe Leu Leu Ser His Leu Ser Phe Ile Asp Met Met Tyr Ile Ser Thr Ile Val Pro Lys Met 70 75 Leu Val Asp Tyr Leu Leu Gly Gln Arg Thr Ile Ser Phe Val Gly Cys 90 Thr Ala Gln His Phe Leu Tyr Leu Thr Leu Val Gly Ala Glu Phe Phe 100 105 Leu Leu Gly Leu Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro 120 125 Leu Arg Tyr Pro Val Leu Met Ser Arg Arg Ile Cys Trp Ile Ile Ile 135 140 Ala Gly Ser Trp Phe Gly Gly Ser Leu Asp Gly Phe Leu Leu Thr Pro 150 155 Ile Thr Met Ser Phe Pro Phe Cys Arg Ser Arg Glu Ile Asn His Phe 170 Phe Cys Glu Ala Pro Ala Val Leu Lys Leu Ala Cys Ala Asp Thr Ala 185 Leu Tyr Glu Thr Val Met Tyr Val Cys Cys Val Leu Met Leu Leu Ile 200 205 Pro Phe Ser Val Val Ile Ser Ser Tyr Ala Arg Ile Leu Ala Thr Val 215 220 Tyr His Met Ser Ser Val Glu Gly Arg Lys Lys Ala Phe Ala Thr Cys

<210> 1398 <211> 309 <212> PRT <213> Mus musculus

<400> 1398

Met Ala Ile Asn Asn Ser Thr Thr Val Val Glu Phe Val Leu Gln Gly Leu Ser Glu Asp Pro Gly Leu Gln Ala Leu Phe Leu Ala Phe Phe Leu 25 Leu Leu Tyr Ile Leu Ala Leu Ala Gly Asn Thr Leu Ile Ile Ala Ile Ser Leu Asn Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala 55 Asn Leu Ala Leu Leu Asp Ile Ile Cys Thr Ser Thr Val Val Pro Lys 70 75 Leu Leu Glu Gly Leu Val Gly Lys Ser Ser His Ile Ser Tyr Lys Gly 85 90 Cys Met Thr Gln Val Phe Phe Leu Ile Trp Val Leu Gly Ala Glu Leu 105 Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg 120 Pro Leu His Tyr Asn Thr Leu Met Ser Trp Pro Ile Cys Val Leu Leu 135 140 Ala Gly Phe Val Trp Val Ile Gly Ile Ala Asn Thr Ser Val His Ile 150 155 Gly Leu Leu Val Arg Leu Asn Phe Cys Gly Ser Asn Gln Ile Arg His 170 165 Phe Leu Cys Glu Val Pro Thr Leu Leu Leu Ser Cys Ser Pro Thr 185 Thr Leu Asn Asn Ile Met Leu Val Ile Ala Asp Val Tyr Phe Gly Val 200 205 Leu Asn Phe Leu Leu Thr Met Ile Ser Tyr Ser Phe Ile Ile Ser Ser 215 Ile Leu Arg Ile Arg Ser Ala Glu Gly Lys Lys Arg Ala Phe Ser Thr 230 235 Cys Ser Ala His Leu Val Val Thr Leu Tyr Tyr Ser Thr Ile Ile 245 250 Tyr Thr Tyr Leu Gln Pro Gly Ser Gly Ser Ser Phe Gln Asn Ser Lys 265 Val Val Thr Leu Leu Tyr Thr Ala Val Ser Pro Thr Leu Asn Pro Ile 280 285 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Lys Arg Leu 290 295

```
<211> 311
<212> PRT
<213> Mus musculus
<400> 1399
Met Ile Lys Asn Asn Gln Thr Leu Phe Asn Gln Phe Leu Leu Gly
                                  10
Leu Pro Ile Pro Ala Glu His Gln Gln Leu Phe Phe Ala Leu Phe Leu
                               25
Ser Met Tyr Leu Thr Thr Ile Leu Gly Asn Leu Ile Ile Ile Leu
                           40
Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                       55
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                   70
Leu Leu Gln Asn Met Gln Ser Gln Asp Thr Ser Ile Thr Tyr Ala Gly
                                   90
               8.5
Cys Leu Thr Gln Met Tyr Phe Phe Val Leu Phe Gly Gly Leu Glu Ile
                               105
Phe Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Leu
                                               125
                          120
Pro Leu His Tyr Thr Ser Ile Met Ser Leu Lys Leu Cys Val Cys Leu
                       135
Val Leu Leu Ser Trp Val Ile Ser Ile Leu Asn Ser Met Leu His Thr
                  150
                                      155
Leu Leu Leu Ala Arg Leu Ser Phe Cys Glu Asp Asn Met Ile Arg His
                                  170
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Ile
           180
                               185
Tyr Ile Asn Glu Leu Met Ile Phe Ile Leu Gly Gly Pro Leu Met Val
                           200
Ile Pro Phe Leu Leu Ile Val Met Ser Tyr Val Gln Ile Ile Phe Ser
                       215
                                           220
Ile Leu Lys Ala Ser Ser Thr Arg Ala Ile Tyr Lys Val Phe Ser Thr
                   230
                                       235
Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
               245
                                   250
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Phe Thr Ala Lys Glu Ala
                               265
           260
Ser Ile Ala Ile Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                           280
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Glu Ala Leu Ile Asn Val
                       295
Leu Ile Lys Lys Ile Pro Leu
305
```

<210> 1400

<211> 314

<212> PRT

<213> Mus musculus

```
<400> 1400
Met Thr Arg Arg Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Gly
Leu Pro Ile Pro Pro Glu His Gln Gln Leu Tyr Tyr Ala Leu Leu Leu
Ser Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu
                            40
Ile Leu Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                       55
Asn Leu Ser Phe Ala Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                                       75
Leu Leu Gln Asn Met Gln Ser Lys Val Pro Ser Ile Pro Tyr Ala Gly
                                    90
Cys Leu Ala Gln Ile Tyr Phe Phe Leu Tyr Phe Gly Asp Leu Gly Asn
           100
                               105
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                           120
Pro Leu His Tyr Met Ser Ile Met Ser Pro Arg Leu Cys Val Ser Leu
                       135
Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                   150
                                       155
Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His
               165
                                   170
Tyr Phe Cys Asp Met Ser Thr Leu Leu Lys Val Ala Cys Ser Asp Thr
                               185
His Asp Asn Glu Leu Ala Ile Phe Ile Leu Gly Gly Pro Ile Val Val
                           200
Leu Pro Phe Leu Leu Ile Ile Val Ser Tyr Ala Arg Ile Val Ser Ser
                       215
                                           220
Ile Phe Lys Phe Pro Ser Phe Gln Gly Ile Arg Lys Ala Phe Ser Thr
                   230
                                       235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile
               245
                                    250
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Thr Tyr Val Lys Glu Thr
                                265
Ile Met Ser Leu Met Tyr Thr Met Val Thr Pro Met Leu Asn Pro Phe
                           280
                                               285
Ile Tyr Ser Leu Ser Asn Arg Asp Ile Lys Asp Ala Leu Glu Lys Ile
                       295
                                            300
Met Cys Lys Arg Gln Ile Pro Phe Phe Leu
                   310
<210> 1401
<211> 312
<212> PRT
<213> Mus musculus
<400> 1401
Met Ile Lys Asn Asn Gln Thr Val Ile Ser Gln Phe Leu Leu Gly
                5
                                   10
Leu Pro Ile Pro Pro Glu His Gln His Leu Phe Tyr Ala Leu Phe Leu
                               25
Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu
                           40
Ile Ile Leu Asp Phe His Leu His Thr Pro Ile Tyr Leu Phe Leu Ser
```

55

60

```
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys
                    70
                                        75
Leu Leu Gln Asn Met Gln Ser Gln Asp Thr Thr Ile Ser Tyr Val Gly
                                    90
Cys Leu Thr Gln Met Tyr Phe Pro Asn Val Phe Ala Asn Leu Glu Asn
                                105
Phe Leu Leu Met Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Tyr
                           120
Pro Leu Arg Tyr Thr Ser Ile Met Ser Pro Ile Leu Cys Val Cys Met
                       135
Val Phe Met Ser Trp Leu Leu Thr Met Leu Asn Ser Thr Leu His Thr
                   150
                                       155
Val Leu Ile Val Lys Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His
               165
                                   170
Phe Phe Cys Asp Ile Ser Ala Val Leu Lys Leu Ala Cys Ser Asp Ile
           180
                               185
Tyr Ile Asn Glu Leu Thr Ile Phe Ile Thr Gly Ala Phe Ile Ile Val
                           200
Ile Pro Phe Leu Leu Ile Val Val Ser Tyr Val Gln Ile Val Cys Ser
                        215
Ile Leu Lys Phe Ser Ser Thr Arg Gly Ile Ala Lys Ile Phe Ser Thr
                   230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
               245
                                   250
Gly Leu Tyr Leu Cys Pro Ser Thr Asn Asn Ser Thr Val Lys Asp Thr
                               265
           260
Ala Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Glu Ala Leu Ile Arg Val
                       295
                                            300
Leu Cys Lys Lys Glu Ile Ser Leu
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1402

Met Ile Met Asn Asn Lys Thr Val Ile Thr Gln Phe Ile Leu Leu Gly Leu Pro Ile Leu Pro Glu Tyr Gln His Leu Phe Tyr Ala Leu Phe Leu 25 Ser Met Tyr Leu Thr Thr Ile Leu Gly Asn Leu Ile Ile Ile Leu 40 Ile Gln Leu Asp Ser His Leu His Thr Pro Ile Tyr Leu Phe Leu Ser 55 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys 70 75 Leu Leu Leu Asn Met Gln Ser Gln Asp Thr Ser Ile Pro Tyr Ala Gly 85 90 Cys Leu Thr Gln Met Tyr Phe Ser Asn Leu Phe Gly Ser Leu Glu Ile 105 110 Phe Leu Leu Val Ile Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Leu 120 Pro Leu His Tyr Thr Ser Ile Met Ser Pro Lys Leu Cys Val Cys Leu

```
130
                      135
Val Leu Leu Ser Trp Val Ile Ser Met Leu Tyr Ser Met Leu His Thr
        150
                                      155
Leu Leu Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His
               165
                                   170
Phe Phe Cys Asp Ile Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Ile
                               185
His Ile Asn Glu Leu Met Ile Phe Phe Leu Gly Gly Pro Leu Thr Val
                           200
                                               205
Ile Pro Phe Leu Leu Ile Val Val Ser Tyr Ile Gln Ile Val Phe Ser
                       215
                                           220
Ile Leu Lys Ile Ser Ser Thr Arg Ala Ile His Lys Val Phe Ser Thr
               230
                                       235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
               245
                                  250
Gly Leu Tyr Leu Cys Pro Ser Ala Asn Asn Phe Ser Val Lys Lys Ala
                              265
Ser Ile Thr Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                           280
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Glu Ala Leu Val Arg Val
                       295
Leu Ile Lys Lys Ile Ser Leu
                   310
```

<211> 315

<212> PRT

<213> Mus musculus

<400> 1403

Met Asp Thr Tyr Asn Leu Thr Val Leu Lys Tyr Phe Ile Leu Thr Gly 10 Ile Thr Asp Leu Pro Glu Leu Gln Ala Pro Leu Phe Gly Leu Phe Leu Ile Ile Tyr Met Ile Ser Val Val Gly Asn Leu Gly Leu Ile Ile Leu 40 Thr Lys Ile Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg 5.5 Gln Leu Ser Leu Thr Asp Leu Gly Tyr Ser Thr Ala Val Gly Pro Lys 70 75 Met Leu Ile Asn Phe Val Ala Asp Gln Pro Thr Ile Ser Tyr Asn Trp 85 90 Cys Ser Val Gln Leu Thr Phe Phe Ser Ile Phe Ile Thr Thr Glu Val 100 105 Phe Ile Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 125 Pro Leu Leu Tyr Thr Ile Ile Met Ser Gln Arg Leu Cys His Val Leu Val Ala Ile Pro Tyr Leu Tyr Ser Val Phe Ile Ser Leu Trp Thr Ile 150 155 Ile Lys Ile Phe Thr Ser Ser Phe Cys Gly His Asn Ile Ile Arg Tyr 170 Phe Tyr Cys Asp Ser Leu Pro Leu Ile Leu Met Leu Cys Ser Asp Thr 180 185 190 His Glu Ile Lys Leu Ile Ile Leu Ile Phe Ala Thr Phe Asn Leu Ile 200 205

```
Ser Ser Leu Leu Val Val Ser Ile Ser Tyr Ile Leu Ile Leu Val Ser
                        215
                                            220
Ile Leu Arg Met Asn Ser Ser Glu Gly Arg His Lys Ala Phe Ser Thr
                   230
                                        235
Cys Gly Ser His Leu Thr Val Ile Val Ile Phe Tyr Gly Thr Leu Phe
                                    250
Phe Met Tyr Ala Gln Pro Lys Ser Ile His Ser Phe Glu Thr Gly Gln
                                265
Val Ala Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Met
                           280
Ile Tyr Ser Leu Arg Asn Gln Glu Val Lys Gln Ala Leu Asn Arg Lys
                       295
Trp Lys Met Cys Val Asn Ile Leu Phe Lys Leu
                    310
```

<210> 1404 <211> 313 <212> PRT

<213> Mus musculus

<400> 1404

Met Glu Lys Tyr Asn Leu Thr Ile Val Thr Glu Phe Ile Leu Val Gly 10 Ile Thr Asn His His Glu Phe Gln Val Pro Leu Phe Gly Leu Tyr Leu 25 Ile Ile Tyr Leu Thr Ser Leu Val Asp Asn Leu Gly Met Ile Ile Leu 40 Thr Ile Val Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg 55 His Leu Ala Thr Thr Asp Leu Gly Tyr Ser Thr Ala Val Gly Pro Lys 70 7.5 Met Leu Arg Asn Phe Leu Val Asp Gln Asn Ile Ile Ser Phe Tyr Ala 85 90 Cys Ala Ile Gln Ser Ser Phe Phe Gly Met Phe Ile Val Cys Glu Phe 105 110 Phe Ile Leu Ser Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys 115 120 125 Pro Leu Leu Tyr Thr Val Ile Met Ser Gln Lys Ala Cys Trp Ile Leu 135 140 Val Thr Ile Pro Tyr Leu Tyr Ser Ile Ile Val Ser Leu Leu Val Asn 150 155 Ile Lys Ile Phe Thr Leu Ser Phe Cys Gly Tyr Asn Val Ile Ser His 165 170 Phe Tyr Cys Asp Ala Leu Pro Leu Leu Thr Leu Ala Cys Ser Asn Thr 185 His Glu Ile Glu Ala Ile Ile Leu Ile Phe Ser Ala Phe Asn Leu Leu 200 Ser Ser Leu Leu Ile Val Ile Gly Ser Tyr Leu Leu Ile Leu Met Ala 215 220 Ile Leu Arg Ile Asn Ser Thr Glu Gly Lys Trp Lys Ala Phe Ser Thr 230 235 Cys Gly Ser His Leu Thr Val Val Ile Val Phe Tyr Gly Thr Leu Ile 245 250 Cys Met Tyr Leu Gln Pro Thr Ser Thr His Ser Ile Asp Thr Gly Lys 265 Gly Thr Ser Ile Phe Tyr Thr Gln Val Ile Pro Met Leu Asn Pro Leu

275 280 285 Ile Tyr Ser Leu Arg Asn Lys Asp Val Thr Asp Val Leu Lys Lys Thr 295 Lys Glu Lys Val Tyr Asn Leu Val Ser 305 310 <210> 1405 <211> 312 <212> PRT <213> Mus musculus <400> 1405 Met Glu Lys Arg Asn Leu Thr Val Val Thr Glu Phe Ile Leu Met Gly 10 Ile Thr Asp Arg Pro Glu Leu Gln Ala Pro Leu Phe Gly Leu Phe Leu Ile Ile Tyr Leu Ile Ser Leu Leu Gly Asn Met Gly Met Ile Ile Leu 35 40 Thr Met Val Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg 55 His Leu Ala Ile Thr Asp Leu Gly Tyr Ser Thr Ala Val Gly Pro Lys 70 75 Met Leu Glu Asn Phe Val Val Asn Gln Asn Thr Ile Ser Asn His Leu 90 8.5 Cys Ala Ile Gln Leu Thr Phe Phe Leu Val Phe Ile Ile Cys Glu Leu 100 105 Phe Ile Leu Ser Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys 120 115 125 Pro Leu Leu Tyr Thr Val Ile Met Ser His Arg Val Cys Trp Val Leu 135 140 Val Ala Val Pro Tyr Phe Tyr Ser Val Ile Ile Ser Leu Leu Ile Thr 150 155 Ile Lys Ile Phe Ala Leu Pro Phe Cys Asp Tyr Arg Ile Val Ser His 165 170 Phe Cys Asp Ser Leu Pro Leu Ile Ser Leu Leu Cys Ser Asn Thr His 185 180 190 Asp Ile Glu Ile Ile Ile Leu Ile Ser Ala Gly Phe Asn Leu Val Ser 200 205 Ser Leu Val Val Leu Leu Phe Ser Tyr Leu Leu Ile Leu Ile Ala Ile 215 220 Phe Arg Met Asn Ser Ala Glu Gly Arg Gln Lys Ala Leu Ser Thr Cys 230 235 Gly Ser His Leu Thr Val Val Ile Val Phe Tyr Gly Thr Leu Ile Phe 250 245 Met Tyr Val Gln Pro Lys Ser Ser His Ser Phe Asp Thr Asp Lys Val 265 Ala Ser Ile Phe Tyr Thr Leu Ile Ile Pro Met Leu Asn Pro Leu Ile 280 Tyr Ser Leu Arg Asn Lys Asp Val Lys Tyr Ala Leu Glu Arg Leu Trp 295 Lys Met Leu Gly Asn Ile Phe Ser

<210> 1406 <211> 313

<400> 1406 Met Glu Asn Gln Asn Leu Ser Val Leu Asn Glu Phe Ile Leu Val Gly 10 Ile Thr Asp Arg Pro Glu Leu Gln Ala Pro Phe Phe Val Leu Phe Phe 25 Leu Ile Tyr Val Ala Ser Val Val Gly Asn Leu Gly Met Ile Val Leu 40 Thr Lys Leu Asp Glu Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg 55 His Leu Ala Phe Ile Asp Phe Gly Tyr Ser Thr Ala Val Gly Pro Lys 75 70 Thr Leu Val Ser Phe Val Thr Asn Lys Asn Thr Ile Pro Tyr Asn Trp 90 Cys Ala Phe Gln Leu Ser Leu Phe Ile Phe Phe Ile Ile Ser Glu Leu 100 105 Phe Val Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 115 120 Pro Leu Leu Tyr Thr Val Ile Met Ser Gln Lys Val Cys Trp Val Leu 135 140 Val Thr Ile Pro Tyr Leu Phe Ser Ala Phe Leu Ser Leu Ile Thr Thr 150 155 Ile Lys Ile Phe Ile Ser Ser Phe Cys Gly Tyr Asn Val Ile Ser His 165 170 Phe Tyr Cys Asp Ser Leu Pro Leu Leu Thr Leu Ile Cys Ser Gly Thr 185 190 180 Arg Asp Val Glu Leu Ile Ile Leu Ile Phe Ser Ala Phe Asn Leu Ile 200 205 Ser Ser Leu Ser Val Val Leu Val Ser Tyr Thr Phe Ile Leu Val Ala 215 Ile Leu Arg Met Asn Ser Ala Glu Gly Arg His Lys Ala Phe Ser Thr 230 235 Cys Gly Ser His Leu Thr Val Val Val Ile Leu Tyr Gly Thr Leu Ser 245 250 Phe Met Tyr Ile Gln Pro Lys Ser Ser His Ser Phe Glu Asn Asp Lys 265 Met Ala Ser Val Phe Tyr Thr Leu Val Ile Pro Val Leu Asn Pro Ile 280 285 Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Gln Lys Leu 295 Trp Lys Asn Val Cys Lys Val Cys Ile 305 310 <210> 1407

<211> 315

<212> PRT

<213> Mus musculus

Met Ala Pro Arg Asn Leu Ser His Val Thr Glu Phe Ile Leu Val Gly 10 Val Ser Asp Leu Pro Glu Leu Gln Val Pro Leu Phe Phe Val Phe Leu 20 25 Val Ile Tyr Leu Leu Thr Ala Ala Gly Asn Leu Gly Ile Ile Thr Leu

```
35
                            40
Thr Ser Val Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg
                       55
His Leu Ala Val Ile Asn Phe Gly Asn Ser Thr Val Ile Ala Pro Lys
Met Leu Val Asn Phe Leu Val Ser Lys Lys Thr Thr Leu Tyr Tyr Glu
                                    90
Cys Ala Thr Gln Leu Gly Gly Phe Leu Val Phe Ile Val Ala Glu Ile
           100
                               105
Phe Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Met Val Val Val Ser Arg Arg Val Cys Leu Leu
                       135
Val Ser Leu Thr Tyr Phe Tyr Gly Phe Cys Thr Ala Ile Val Val Ser
                   150
                                       155
Ser Cys Val Phe Ser Val Ser Tyr Cys Ser Ser Lys Lys Ile Asn His
                                   170
Phe Tyr Cys Asp Asn Val Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr
            180
                                185
Tyr Leu Pro Glu Thr Val Val Phe Ile Ser Ala Ala Thr Asn Leu Phe
                            200
Phe Ser Met Ser Ile Val Leu Val Ser Tyr Phe Asn Ile Val Leu Ser
                        215
                                           220
Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr
                   230
                                        235
Cys Ala Ser His Met Met Ala Val Thr Val Phe Tyr Gly Thr Leu Leu
                245
                                    250
Phe Met Tyr Leu Gln Pro Gln Thr Asn His Ser Leu Asp Thr Asp Lys
                                265
Met Ala Ser Val Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Met
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ala Ala Leu Lys Arg Phe
                       295
Met Thr Asn Pro Cys Asp Ser Phe Lys Ser Leu
305
                    310
<210> 1408
<211> 308
<212> PRT
<213> Mus musculus
<400> 1408
Met Gly Gln Pro Asn Ile Thr Met Pro Thr Glu Phe Ile Leu Met Gly
                                    10
Val Thr Gln Thr Ala Glu Leu Lys Leu Pro Leu Phe Ala Val Phe Leu
Thr Ile Tyr Ala Ile Thr Val Val Gly Asn Leu Gly Met Ile Ile Leu
Thr Lys Leu Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Ile Arg
```

5.5

70

85

His Leu Ala Phe Ile Asp Leu Gly Asn Ser Thr Ala Ile Cys Pro Lys

Met Leu Val Asn Phe Val Val Asp Lys Asn Asn Ile Thr Tyr Tyr Ala

Cys Ala Thr Gln Met Ala Cys Phe Ile Leu Phe Ile Val Ser Glu Phe
100 105 110

60

75

90

```
Ser Ile Leu Ser Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                           120
                                               125
Pro Leu Leu Tyr Ser Ala Ile Met Ser Gln Arg Arg Cys Gln Val Leu
                       135
Ile Gly Ile Pro Tyr Leu Tyr Ser Ile Phe Gln Ala Leu Leu Phe Pro
                   150
                                       155
Ile Arg Tyr Phe Thr Leu Ser Phe Cys Gly Ala Asn Val Ile Ser His
               165
                                   170
Phe Tyr Cys Asp Val Val Pro Leu Pro Leu Ile Cys Ser His Val
                               185
Glu Glu Thr Glu Leu Leu Thr Ile Leu Phe Ser Ala Phe Asn Leu Ile
                           200
                                                205
Ser Ser Leu Leu Val Val Leu Leu Ser Tyr Met Leu Ile Leu Leu Thr
                       215
                                            220
Ile Phe Arg Met Arg Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr
                   230
                                       235
Cys Gly Ser His Leu Thr Val Val Val Phe Tyr Gly Ser Leu Leu
               245
                                   250
Phe Met Tyr Val Gln Pro Lys Ser Ala His Ser Phe Glu Tyr Asp Lys
                                265
Ala Ala Ser Val Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                           280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Phe His Arg Val
   290
                       295
Phe Lys Asn Leu
305
```

<211> 310

<212> PRT

<213> Mus musculus

<400> 1409

Met Asp Lys Glu Asn His Ser Val Val Thr Glu Phe Val Phe Met Gly Ile Thr Gln Asp Pro Gln Leu Gln Ile Ile Phe Phe Val Val Phe Leu 25 Leu Val Tyr Leu Val Asn Val Ile Gly Asn Val Gly Met Ile Ile Leu 40 Ile Ile Thr Asp Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Cys 55 60 Asn Leu Ser Phe Val Asp Leu Gly Tyr Ser Ser Ala Ile Ala Pro Arg 70 75 Met Leu Ala Asp Phe Leu Thr Lys His Lys Val Ile Ser Phe Ser Ser 85 90 Cys Ala Thr Gln Phe Ala Phe Phe Val Gly Phe Val Asp Ala Glu Cys 105 Tyr Val Leu Ala Ala Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Arg 120 Pro Leu His Tyr Ser Thr Leu Met Ser Lys Lys Val Cys Leu Val Leu 135 140 Met Leu Gly Ser Tyr Phe Ala Gly Leu Val Ser Leu Val Ala His Thr 150 155 Ser Leu Thr Phe Ser Leu Ser Tyr Cys Gly Ser Asn Ile Ile Asn His 165 170 Phe Phe Cys Glu Ile Pro Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr

180 185 Tyr Ile Ser Glu Ile Leu Leu Phe Ser Leu Cys Gly Phe Ile Glu Phe 200 Ser Thr Ile Leu Ile Ile Phe Ile Ser Tyr Ala Phe Ile Leu Ile Ala 215 Ile Ile Arg Ile Arg Ser Ala Glu Gly Arg Leu Lys Ala Phe Ser Thr 235 230 Cys Gly Ser His Leu Thr Gly Val Thr Leu Phe Tyr Gly Thr Val Met 250 Phe Met Tyr Leu Arg Pro Thr Ser Ser Tyr Ser Leu Asp Gln Asp Lys 265 260 Trp Ala Ser Val Phe Tyr Thr Ile Ile Ile Pro Met Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ala Ala Phe Lys Lys Leu 295 Ile Gly Lys Lys Pro Gln

<210> 1410 <211> 320 <212> PRT <213> Mus musculus

<400> 1410

Met Ser Phe Gln Lys Val Glu Met Ser His Arg Asn Ser Thr Val Pro 10 Asp Glu Phe Ile Leu Thr Arg Ile Thr His Arg Pro Glu Leu Gln Leu 25 2.0 Leu Leu Gly Val Phe Ile Val Ile Tyr Gly Val Ala Met Ile Gly 40 Asn Met Ser Met Ile Ile Leu Thr Lys Leu Asp Ser Arg Leu His Thr 5.5 Pro Met Tyr Tyr Phe Ile Arg His Leu Ala Phe Ile Asp Leu Gly Asn Cys Thr Val Ile Tyr Pro Lys Met Met Val Asn Phe Val Val Glu Gln 85 90 Asn Val Ile Ser Tyr Tyr Ala Cys Ala Val Gln Met Ala Phe Tyr Ile 105 Ala Phe Ile Ile Ser Glu Leu Phe Ile Leu Ser Ala Met Ala Tyr Asp 120 125 Arg Tyr Val Ala Ile Cys Asn Pro Leu Leu Tyr Ser Ala Ile Met Ser 135 140 Gln Arg Arg Cys His Val Leu Val Gly Ile Pro Tyr Leu Tyr Ser Val 150 155 Phe Gln Ala Val Met Ile Thr Ser Lys Ile Phe Thr Leu Thr Phe Cys 165 170 Asp Ser Asn Val Ile Ser His Phe Tyr Cys Asp Asn Val Pro Met Leu 185 Leu Leu Cys Ser Asn Ala Arg Asp Ile Glu Leu Leu Ile Ile Leu 200 Phe Ser Ala Leu Asn Leu Ile Ser Ser Leu Phe Val Val Leu Val Ser 215 Tyr Leu Leu Ile Leu Leu Ala Ile Tyr Arg Met His Ser Ala Asp Gly 230 235 Arg Lys Lys Ala Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Val 250

 Val
 Phe
 Tyr
 Gly
 Thr
 Leu
 Leu
 Phe
 Met
 Tyr
 Leu
 Gln
 Pro
 Lys
 Ile
 Ala
 Ser
 Val
 Phe
 Tyr
 Thr
 Leu
 Val

 His
 Ser
 Phe
 Glu
 Thr
 Asp
 Lys
 Ile
 Ala
 Ser
 Val
 Phe
 Tyr
 Thr
 Lys
 Glu
 Val

 Ile
 Pro
 Met
 Leu
 Asp
 Pro
 Leu
 Ile
 Tyr
 Ser
 Phe
 Arg
 Asp
 Lys
 Glu
 Val

 Lys
 Asp
 Val
 Leu
 Arg
 Val
 Phe
 Arg
 Tyr
 Gln
 Cys
 Lys
 Leu
 Cys
 Thr

 305
 Inc
 I

<210> 1411

<211> 319

<212> PRT

<213> Mus musculus

<400> 1411 Met Ala Glu Val Asn Ile Ser Tyr Val Ser Glu Phe Ile Leu Lys Gly 10 Ile Thr Asp Arg Pro Glu Leu Gln Ala Pro Cys Phe Val Met Phe Leu 25 Thr Ile Tyr Leu Val Thr Val Leu Gly Asn Leu Gly Leu Ile Val Ile 40 Ile Arg Val Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser 5.5 60 His Leu Ala Phe Val Asp Leu Cys Tyr Ser Ser Ala Ile Thr Pro Lys 75 Met Met Val Asn Phe Val Val Glu Arg Asn Thr Ile Pro Phe His Ala 85 90 Cys Ala Thr Gln Leu Gly Cys Phe Leu Thr Phe Met Ile Thr Glu Cys 105 100 110 Phe Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser 120 125 Pro Leu His Tyr Ser Thr Leu Met Ser Lys Arg Val Cys Ile Gln Leu 135 140 Val Ala Val Pro Tyr Val Tyr Ser Phe Leu Val Ala Leu Phe His Thr 150 155 Ile Ile Thr Phe Arg Leu Thr Tyr Cys Gly Pro Asn Val Ile Asn His 165 170 Phe Tyr Cys Asp Asp Leu Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr 185 His Met Lys Glu Ile Leu Ile Phe Ala Phe Ala Gly Phe Asp Met Ile 195 200 205 Cys Ser Ser Ser Ile Val Leu Thr Ser Tyr Leu Phe Ile Ile Ala Ala 215 220 Ile Leu Arg Ile Arg Ser Thr Gln Gly Arg Arg Lys Ala Ile Ser Thr 230 235 Cys Gly Ser His Met Val Ala Val Thr Ile Phe Tyr Gly Thr Leu Ile 245 250 Phe Met Tyr Leu Gln Pro Lys Ser Asn His Ser Leu Asp Thr Asp Lys 265 Met Ala Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu 280 285 Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Ser Lys Lys Ala 295 Leu Asp Lys Gly Tyr Glu Thr Leu Lys Ile Leu Arg Leu Ser Lys 310

```
<212> PRT
<213> Mus musculus
<400> 1412
Met Gly Arg His Asn Leu Thr Val Val Thr Glu Phe Val Leu Met Gly
                                   10
Ile Thr Asp Arg Pro Glu Leu Gln Ala Pro Leu Phe Gly Leu Phe Leu
                               25
Ile Ile Tyr Leu Ile Ser Leu Ile Gly Asn Leu Gly Met Ile Ile Leu
                           40
Thr Thr Val Asp Ser Lys Leu Gln Thr Pro Met Tyr Phe Phe Leu Lys
                       55
His Leu Ala Ile Thr Asp Leu Gly Tyr Ser Thr Ser Val Gly Pro Lys
                   70
Met Leu Val Asn Phe Val Val Asp Gln Asn Thr Ile Ser Phe Lys Leu
                                   90
Cys Ala Thr Gln Leu Ser Phe Phe Leu Val Phe Ile Val Ser Glu Leu
                                105
Phe Ile Leu Ser Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                           120
Pro Leu Leu Tyr Thr Val Ile Met Ser Gln Lys Leu Cys Trp Val Leu
                       135
Val Ala Ile Pro Tyr Leu Tyr Cys Thr Phe Val Ser Leu Leu Val Thr
                   150
                                       155
Val Lys Ile Phe Thr Leu Ser Phe Cys Gly Tyr Asn Val Ile Ser His
                                170
               165
Phe Tyr Cys Asp Ser Leu Pro Leu Leu Pro Leu Leu Cys Ser Asp Thr
           180
                              185
His Asp Ile Glu Leu Ile Ile Leu Ile Leu Ala Ala Phe Asp Leu Ile
                           200
Ser Ser Leu Leu Val Val Leu Val Ser Tyr Leu Leu Ile Leu Ile Ala
                        215
Ile Val Arg Met Asn Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                                        235
                   230
Cys Gly Ser His Leu Thr Val Val Ile Val Phe Tyr Gly Thr Leu Ile
               245
                                   250
Phe Met Tyr Val Gln Pro Asn Ser Ser His Ser Phe Glu Thr Asp Lys
           260
                               265
Val Ala Ser Ile Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Tyr Ala Leu Lys Arg Thr
                       295
                                           300
Leu Asn Asn Leu Cys Lys Leu Phe Ser Leu Ala Phe His Lys Ile
<210> 1413
<211> 314
<212> PRT
<213> Mus musculus
<400> 1413
Met Ala Gln Ile Asn Cys Thr Gln Val Thr Glu Phe Ile Leu Val Gly
```

<210> 1412 <211> 319

```
Leu Thr Asp Arg Glu Glu Leu Lys Met Pro Leu Phe Val Val Phe Leu
                                2.5
Ser Ile Tyr Leu Phe Thr Thr Leu Gly Asn Leu Gly Leu Ile Leu Val
Ile Arg Thr Asp Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
Asn Leu Ala Phe Val Asp Phe Cys Tyr Ser Ser Val Ile Thr Pro Lys
                                       75
                   70
Met Leu Gly Asn Phe Leu Tyr Lys Gln Asn Met Ile Ser Phe Asn Ala
Cys Ala Ala Gln Leu Gly Cys Phe Leu Ala Phe Met Thr Ala Glu Cys
                               105
Leu Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
       115
                           120
                                               125
Pro Leu Leu Tyr Met Val Leu Met Ser Pro Gly Ile Cys Phe Gln Leu
                       135
                                           140
Val Ala Ala Pro Tyr Ser Tyr Ser Phe Leu Val Ala Leu Phe His Ala
                    150
                                        155
Ile Leu Thr Phe Arg Leu Cys Tyr Cys His Ser Asn Ala Ile Asn His
                                    170
Phe Tyr Cys Asp Asp Met Pro Leu Leu Arg Leu Thr Cys Ser Asp Thr
                               185
His Ser Lys Gln Leu Trp Ile Phe Val Cys Ala Gly Ile Met Phe Ile
                           200
Ser Ser Leu Leu Ile Val Phe Ile Ser Tyr Thr Phe Ile Ile Ser Ala
                                            220
                       215
Ile Leu Arg Met Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                   230
                                        235
Cys Gly Ser His Met Leu Ala Val Thr Ile Phe Tyr Gly Thr Leu Ile
                                   250
               245
Phe Met Tyr Leu Gln Pro Ser Ser Asn His Ser Leu Asp Thr Asp Lys
                                265
Met Ala Ser Val Phe Tyr Thr Val Ile Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Leu Lys Lys Leu
                        295
Ile Ala Ser Lys Asn Gln Met Leu Ser Ser
                    310
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1414

 Met
 Ala
 Thr
 Glu
 Asn
 Cys
 Thr
 Val
 Thr
 Glu
 Phe
 Ile
 Leu
 Leu
 Gly

 Leu
 Thr
 Asp
 Arg
 Ala
 Glu
 Leu
 Lys
 Met
 Met
 Leu
 Phe
 Val
 Leu
 Phe
 Leu

 Val
 Ile
 Tyr
 Ala
 Val
 Thr
 Leu
 Leu
 Gly
 Asn
 Leu
 Gly
 Met
 Ile
 Leu
 Leu
 Leu

 Ile
 Arg
 Ile
 Thr
 Pro
 Lys
 Leu
 His
 Thr
 Pro
 Met
 Tyr
 Phe
 Phe
 Phe
 Leu
 Ser

 Cys
 Leu
 Ser
 Phe
 Val
 Asp
 Ala
 Cys
 Tyr
 Ser
 Ser
 Val
 Ile
 Ala
 Pro
 Lys

 Met
 Leu
 Ile
 Ser
 Phe
 Leu
 Val
 Val
 Thr
 Glu
 Thr
 Ile
 Ser
 Phe
 Leu

 Met
 Leu
 Ile
 Ser
 P

```
85
                                   90
Cys Ile Met Gln His Leu Phe Phe Gly Val Leu Val Thr Thr Glu Gly
           100
                               105
Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Val Val Asn
                           120
Pro Leu Leu Tyr Thr Val Ser Met Ser Lys Gln Lys Cys Ile Met Met
Val Thr Gly Ser Val Ile Gly Gly Thr Ile Asn Ser Leu Thr His Thr
                   150
                                       155
Ile Ser Leu Ser Lys Leu Ser Phe Cys Gly Pro Asn Ile Val Gly His
                                   170
               165
Phe Phe Cys Asp Ile Pro Ser Leu Leu Ile Leu Ser Cys Ser Asp Thr
                               185
           180
Ser Met Asn Glu Phe Leu Leu Ile Phe Ser Gly Val Ile Ala Ile
       195
                           200
                                               205
Gly Thr Leu Leu Ile Val Phe Ile Ser Tyr Leu Phe Ile Ala Leu Ala
                       215
                                           220
Ile Leu Arg Ile Arg Ser Ala Ser Gly Arg Gln Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ala Ser His Leu Thr Ala Val Thr Ile Phe Tyr Gly Thr Leu Ser
                245
                                    250
Phe Asn Tyr Ile Gln Pro Ser Ser Gln Tyr Ser Val Glu Gln Glu Lys
                               265
Val Val Ser Val Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Met
                          280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Ala Lys Arg Ala
                      295
Ile Glu Met Lys Ser Phe Ser Cys
```

<210> 1415 <211> 301

<212> PRT

<213> Mus musculus

<400> 1415

Met Ile Ile Asn Asn Gln Thr Ala Ile Pro Gln Phe Ile Leu Leu Gly Leu Pro Ile Leu Pro Glu Gln Gln Met Phe Tyr Ala Leu Phe Leu 25 Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu 40 Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser 55 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys Leu Leu Gln Asn Ile Gln Ser Gln Asp Pro Ser Ile Ser Tyr Ala Gly 90 85 Cys Leu Thr Gln Met Tyr Phe Phe Met Val Phe Ala Asn Thr Glu Asn 105 Val Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe 120 Pro Leu His Tyr Thr Ser Ile Met Ser Pro Lys Leu Cys Val Ser Leu 135 140 Val Val Leu Thr Trp Val Phe Thr Val Leu Tyr Ser Met Leu His Thr 150 155

```
Leu Leu Leu Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His
               165
                                    170
Phe Phe Cys Asp Ile Ser Val Leu Leu Lys Leu Ala Cys Ser Asp Thr
                                185
            180
Tyr Ile Asn Glu Leu Met Ile Phe Ile Leu Gly Gly Leu Asp Ile Val
                            200
Ile Pro Phe Ile Leu Ile Val Val Ser Tyr Val Gln Ile Val Cys Ser
                        215
                                            220
Ile Leu Lys Phe Ser Ser Thr Arg Gly Ile Ala Lys Val Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
                245
                                    250
Gly Val Tyr Ile Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu Ile
                               265
           260
Val Met Ala Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                           280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Glu Ala Leu
    290
                        295
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1416

Met Thr Gly Asn Asn Gln Thr Leu Ile Ser Lys Phe Leu Leu Gly 10 Leu Pro Ile Leu Ser Glu Tyr His Phe Leu Phe Tyr Ala Leu Phe Leu 20 25 Ala Met Tyr Leu Thr Thr Ile Leu Gly Asn Leu Leu Ile Ile Ala Leu 45 40 Val Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser 55 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys 70 75 Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Ser Tyr Val Gly 90 Cys Leu Thr Gln Leu Tyr Phe Phe Met Val Phe Gly Asp Met Glu Ser 100 105 Phe Leu Leu Val Val Met Ala Tyr Asp His Tyr Val Ala Ile Cys Phe 115 120 Pro Leu His Tyr Thr Ser Ile Met Ser Thr Lys Phe Cys Thr Ser Leu 130 135 140 Val Leu Leu Trp Met Leu Thr Thr Ser Asn Ala Met Met His Thr 150 155 Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Lys Asn Val Ile Leu His 165 170 Phe Phe Cys Asp Ile Ser Ala Leu Leu Lys Leu Ser Cys Ser Asp Thr 185 190 180 Phe Val Asn Glu Leu Met Ile Phe Ile Met Gly Gly Ile Ile Ile Ile 200 205 Ile Pro Phe Leu Leu Ile Val Met Ser Tyr Val Arg Ile Phe Phe Ser 215 220 Ile Leu Lys Val Pro Ser Thr Gln Gly Ile His Lys Val Phe Ser Thr 230 235 Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile

245 250 Gly Leu Tyr Leu Cys Pro Ser Ser Asn Asn Ser Thr Val Lys Glu Ser 265 Ala Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe 280 Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Ile Arg Val 295 Ile Cys Ser Lys Lys Ile Ser Leu 310 <210> 1417 <211> 312 <212> PRT <213> Mus musculus <400> 1417 Met Lys Met Asn Asn Lys Thr Val Ile Thr Gln Phe Leu Leu Gly Leu Pro Ile Ser Leu Glu Tyr Lys His Leu Phe Tyr Ala Leu Phe Leu 25 Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Val Leu 40 Ile Lys Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser 55 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys 70 75 Met Leu His Asn Met Gln Ser Gln Asp Pro Ser Ile Pro Tyr Gly Gly 85 90 Cys Leu Ala Gln Ile Tyr Phe Leu Met Ala Phe Gly Asp Met Glu Ser 100 105 Phe Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe 120 Pro Leu His Tyr Thr Ser Ile Met Ser Pro Lys Leu Cys Thr Cys Leu 135 Met Leu Leu Trp Ile Leu Thr Thr Ser His Ala Met Met His Thr 150 155 Leu Leu Ala Ala Arg Leu Ser Phe Cys Glu Asn Asn Val Ile Leu Asn 170 Phe Phe Cys Asp Leu Phe Ala Val Leu Lys Leu Ser Cys Ser Asp Thr 185 180 190 Tyr Ile Asn Asp Leu Met Ile Leu Ile Phe Gly Gly Leu Ile Phe Ile 195 200 205 Ile Pro Phe Leu Leu Ile Val Ile Ser Tyr Ala Arg Ile Ile Ser Ser 215 220 Ile Leu Lys Val Pro Ser Thr Gln Gly Ile Tyr Lys Val Phe Ser Thr 230 235 Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile 245 Gly Leu Tyr Leu Cys Pro Ser Gly Asn Asn Ser Thr Val Lys Glu Ile 265 270 Ala Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe 280 285 Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Lys Ala Leu Ile Arg Val 295 300 Ile Cys Ser Lys Lys Ile Ser Leu

310

```
<211> 310
<212> PRT
<213> Mus musculus
<400> 1418
Met Asn Asn Lys Thr Val Ile Thr Gln Phe Leu Leu Gly Leu Pro
Ile Pro Pro Glu Tyr Gln His Leu Phe Tyr Ala Leu Phe Leu Ala Met
                                25
Tyr Leu Thr Thr Ile Leu Gly Asn Leu Leu Ile Ile Val Leu Ile Gln
                            40
                                                45
Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser Asn Leu
                        55
Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys Leu Leu
                    70
                                        75
Gln Asn Met Gln Ser Gln Asp Pro Ser Ile Pro Tyr Gly Gly Cys Leu
                                    90
Ala Gln Ile Phe Phe Phe Met Leu Phe Gly Asp Met Glu Ser Phe Leu
                                105
            100
Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu
                           120
His Tyr Thr Ser Ile Met Ser Pro Lys Val Cys Thr Phe Leu Val Leu
                        135
                                           140
Leu Leu Trp Ile Leu Thr Thr Ser His Ala Thr Met Gln Ile Leu Leu
                   150
                                        155
Thr Val Arg Leu Ser Phe Cys Glu Asn Asn Val Leu Leu Asn Phe Phe
               165
                                   170
Cys Asp Ile Phe Val Leu Leu Lys Leu Ala Cys Ser Asp Thr Tyr Val
                               185
Asn Asp Leu Met Ile Leu Ile Met Gly Gly Leu Ile Ile Val Ile Pro
       195
                            200
Phe Leu Leu Ile Val Ile Ser Tyr Ala Arg Ile Ile Ser Ser Thr Leu
                        215
                                            220
Lys Val Pro Ser Thr Gln Gly Ile His Lys Val Phe Ser Thr Cys Gly
                    230
                                        235
Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile Gly Leu
                245
                                    250
Tyr Leu Cys Pro Ser Gly Asn Asn Phe Ser Leu Lys Gly Ser Ala Met
                                265
Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                            280
                                               285
Ser Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Ile Arg Ile Ile Gly
Ser Lys Lys Ile Ser Leu
305
                    310
<210> 1419
<211> 312
<212> PRT
<213> Mus musculus
```

Met Ala Gly Asn Asn Gln Thr Phe Ile Leu Glu Phe Leu Phe Leu Gly

<210> 1418

<400> 1419

```
10
Leu Pro Ile Pro Ser Glu Tyr Gln Leu Leu Phe Asn Ala Leu Phe Leu
                               25
Ala Met Tyr Leu Thr Thr Leu Leu Gly Asn Leu Leu Ile Ile Leu Leu
Val Gln Leu Asp Ser His Leu His Met Pro Met Tyr Leu Phe Leu Ser
                       55
Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Ile Pro Lys
                   70
                                       75
Leu Leu Gln Asn Met His Ser Gln Val Pro Thr Ile Ser Tyr Ala Asp
                                   90
               85
Cys Leu Thr Gln Leu Tyr Phe Phe Leu Val Phe Gly Asp Met Glu Ser
                              105
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                           120
                                               125
Pro Leu His Tyr Thr Ser Ile Met Ser Thr Lys Leu Cys Val Ser Leu
                       135
Val Leu Leu Trp Met Leu Thr Ile Phe His Ala Leu Leu His Thr
                   150
                                       155
Leu Leu Thr Ala Arg Leu Ser Phe Cys Glu Lys Asn Val Ile Leu His
               165
                                   170
Phe Phe Cys Asp Leu Pro Ala Leu Leu Lys Leu Ser Cys Ser Asp Thr
                               185
           180
Phe Val Asn Glu Leu Met Ile Phe Ile Leu Gly Gly Ile Ile Ser Ile
                           200
Ile Pro Phe Leu Leu Ile Gly Met Ser Tyr Val Arg Ile Phe Phe Ser
                       215
                                           220
Ile Leu Lys Val Pro Ser Thr Gln Gly Ile His Lys Val Phe Ser Thr
                   230
                                       235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
               245
                                   250
Gly Leu Tyr Leu Cys Pro Ser Ser Asn Asn Ser Thr Leu Lys Lys Thr
                               265
Ala Met Ala Leu Met Tyr Thr Leu Val Thr Pro Met Leu Asn Pro Phe
                           280
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Arg Ala Leu Ile Arg Val
                       295
Ile Ser Ser Lys Lys Ile Ser Leu
                   310
```

<210> 1420 <211> 312 <212> PRT

<213> Mus musculus

<400> 1420

 Met
 Ala
 Gly
 Lys
 Asn
 Gln
 Thr
 Leu
 Ile
 Leu
 Glu
 Phe
 Leu
 Leu
 Leu
 Gly
 15
 Leu
 Gly
 10
 Tyr
 Ala
 Leu
 Leu
 Leu
 Phe
 Tyr
 Ala
 Leu
 Leu
 Leu
 Leu
 Phe
 Tyr
 Ala
 Leu
 Leu
 Leu
 Leu
 Phe
 Tyr
 Ala
 Leu
 Leu
 Leu
 Leu
 Asn
 Leu
 Leu
 Leu
 Hu
 Leu
 Asn
 Leu
 His
 Leu
 His
 Thr
 Pro
 Met
 Tyr
 Leu
 Phe
 Leu
 Ser

 Asn
 Leu
 Ser
 Phe
 Ser
 Asp
 Leu
 Cys
 Phe
 Ser
 Val
 Thr
 Ile
 Pro
 Lys

 65
 70
 70
 70
 75
 75
 70
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10

```
Leu Leu Gln Asn Met Gln Ser Gln Val Pro Thr Ile Ser Tyr Ala Asp
               85
                                   90
Cys Leu Thr Gln Leu Tyr Phe Phe Met Val Phe Gly Asp Met Glu Ser
           100
                               105
Phe Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                           120
Pro Leu His Tyr Thr Ser Ile Met Ser Thr Lys Phe Cys Ala Leu Leu
                       135
Val Leu Leu Trp Met Leu Thr Ile Ser His Ala Leu Leu His Thr
                   150
                                       155
Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Lys Asn Val Ile Leu His
               165
                                  170
Phe Phe Cys Asp Ile Ser Ala Leu Leu Lys Leu Ser Cys Ser Asp Thr
           180
                               185
Tyr Val Asn Glu Leu Met Ile Phe Ile Met Gly Gly Ile Ile Ser Ile
                           200
Ile Pro Phe Leu Leu Ile Val Met Ser Tyr Val Arg Ile Phe Phe Ser
                       215
                                           220
Ile Leu Lys Val Pro Ser Ser Gln Asp Ile His Lys Val Phe Ser Thr
                   230
                                        235
Cys Gly Ser His Leu Ser Val Val Thr Leu Phe Tyr Gly Thr Ile Ile
                                   250
               245
Gly Leu Tyr Leu Cys Pro Ser Gly Asn Asn Ser Thr Val Asn Glu Ile
                               265
Ser Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                           280
       275
                                               285
Ile Tyr Arg Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Ile Arg Val
                       295
Ile Phe Ser Lys Lys Ile Ser Leu
305
                   310
```

<210> 1421 <211> 311

<212> PRT <213> Mus musculus

<400> 1421

Met Asp Leu Gly Thr Leu Gly Asn Asp Ser Cys Val Ser Thr Phe Val 10 Leu Leu Gly Leu Thr Glu Thr Pro Val Leu Arg Pro Ile Leu Phe Val 25 Ile Phe Leu Leu Ala Tyr Val Ala Thr Leu Gly Gly Asn Phe Ser Ile 40 Leu Ala Ala Ile Ile Ile Glu Pro Lys Leu His Thr Pro Met Tyr Phe 55 Phe Leu Gly Asn Leu Ser Met Leu Asp Val Gly Cys Ile Ser Val Thr 75 Val Pro Ala Met Leu Lys His Phe Leu Ser Asn Asp Arg His Ile Pro 85 90 Tyr Gly Ala Cys Leu Ser Gln Leu Phe Phe His Leu Leu Ala Gly 105 Ala Asp Cys Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Leu Ala 120 115 125 Ile Cys His Pro Leu Thr Tyr Asn Thr His Met Ser Trp Arg Ile Gln · 135 130 Lys Ala Ser Val Cys Leu Ser Cys Val Phe Ser Phe Ser Asn Ala Leu

```
150
                                      155
145
Thr Gln Thr Val Ala Leu Ser Thr Leu Lys Phe Cys Gly Pro Asn Thr
                                  170
              165
Ile Asn His Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys
                               185
Ser Ser Ile Gln Leu Asn Glu Gln Leu Leu Phe Val Ala Ala Ala Phe
                           200
Met Gly Val Val Pro Leu Val Leu Ile Thr Val Ser Tyr Gly His Val
                      215
Ala Ala Val Leu Arg Ile Arg Ser Ala Glu Gly Arg Lys Lys Ala
                  230
                                      235
Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Gly Ile Phe Tyr Gly
                           250
              245
Thr Gly Val Phe Ser Tyr Met Arg Leu Gly Ser Val Glu Ser Ser Asp
                              265
           260
Lys Asp Lys Gly Ile Gly Ile Leu Asn Thr Val Ile Ser Pro Met Leu
                           280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Pro Asp Val Gln Gly Ala Leu
                       295
Trp Lys Val Leu Thr Gly Arg
```

<210> 1422 <211> 315 <212> PRT

<213> Mus musculus

<400> 1422 Met Glu Pro Gly Ala Trp Gly Asn Arg Thr Ala Val Thr Asp Phe Ile 10 Leu Leu Gly Leu Thr Gly Asn Val Arg Leu Gln Pro Ile Leu Phe Val 25 Val Phe Phe Phe Ala Tyr Ile Val Thr Val Gly Gly Asn Leu Ser Ile Leu Ala Ala Ile Phe Val Glu Pro Lys Leu His Thr Pro Met Tyr Tyr 55 Phe Leu Gly Asn Leu Ser Leu Leu Asp Ile Gly Cys Ile Ser Val Thr 70 75 Val Pro Pro Met Leu Val Cys Leu Leu Ala His Glu Cys Arg Val Pro 90 Tyr Ala Ala Cys Ile Ser Gln Leu Phe Phe Phe His Leu Leu Ala Gly 100 105 Val Asp Cys His Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Leu Ala 120 Ile Cys Gln Pro Leu Thr Tyr Ser Thr Arg Met Ser Arg Glu Val Gln 135 Gly Thr Leu Val Gly Ile Cys Cys Thr Val Ser Phe Ile Asn Ala Leu 150 155 Thr His Thr Val Ala Val Ser Val Leu Asp Phe Cys Gly Pro Asn Val 165 170 Val Asn His Phe Tyr Cys Asp Leu Pro Pro Leu Phe Gln Leu Ser Cys 180 185 Ser Ser Ile Tyr Leu Asn Gly Gln Leu Leu Phe Val Gly Ala Thr Phe 200 Met Gly Val Val Pro Met Ile Leu Ile Ser Val Ser Tyr Ala His Val 215 210 220

```
Ala Ala Ala Val Leu Arg Ile Arg Ser Thr Glu Glu Arg Lys Lys Ala 225

Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Cys Ile Phe Tyr Gly 255

Thr Gly Phe Phe Ser Tyr Met Arg Leu Gly Ser Val Ser Ala Ser Asp 260

Lys Asp Lys Gly Ile Gly Ile Leu Arg Asp Thr Jul Leu 285

Asn Pro Leu Ile Tyr Ser Leu Arg Asp Asp Pro Asp Val Gly Gly Ala Leu 290

Lys Arg Val Leu Thr Gly Lys Arg Tyr Pro Val 315
```

<210> 1423 <211> 308 <212> PRT <213> Mus musculus

<400> 1423

<pre><400> 1423 Met Thr Glu Asp Asn Tyr Ser Leu Thr Thr Glu Phe Ile Leu Ile Gly</pre>															
Met 1	Thr	Glu	Asp	Asn 5	Tyr	Ser	Leu	Thr	Thr 10	Glu	Phe	Ile	Leu	Ile 15	Gly
Phe	Ser	Asp	His 20	Pro	Asp	Leu	Lys	Ile 25	Leu	Leu	Phe	Leu	Val 30	Phe	Ser
Thr	Ile	Tyr 35	Leu	Val	Thr	Met	Val 40	Gly	Asn	Leu	Gly	Leu 45	Val	Ala	Leu
Ile	Tyr 50	Met	Glu	Pro	Arg	Leu 55	His	Thr	Pro	Met	Tyr 60	Ile	Phe	Leu	Gly
Asn 65	Leu	Ala	Leu	Met	Asp 70	Ser	Cys	Cys	Ser	Cys 75	Ala	Ile	Thr	Pro	Lys 80
Met	Leu	Glu	Asn	Phe 85	Phe	Ser	Val	Asn	Lys 90	Arg	Ile	Ser	Leu	Tyr 95	Glu
Cys	Met	Ala	Gln 100	Phe	Tyr	Phe	Leu	Cys 105	Leu	Ala	Glu	Thr	Ala 110	Asp	Cys
		115					Tyr 120					125			
	130					135	Met				140				
Thr 145	Thr	Gly	Ala	Tyr	Ile 150	Ala	Gly	Asn	Leu	His 155	Ser	Met	Ile	His	Ile 160
Gly	Phe	Leu	Phe	Arg 165	Leu	Thr	Phe	Cys	Arg 170	Ser	His	Val	Ile	Lys 175	His
Phe	Phe	Cys	Asp 180	Val	Leu	Pro	Leu	Tyr 185	Arg	Leu	Ser	Cys	Val 190	Asp	Pro
Tyr	Ile	Asn 195	Glu	Leu	Met	Ile	Leu 200	Ile	Phe	Ser	Gly	Ser 205	Val	Gln	Thr
Phe	Ser 210	Ile	Ile	Ile	Val	Leu 215	Ile	Ser	Tyr	Phe	Cys 220	Ile	Ile	Phe	Thr
Ile 225	Phe	Thr	Met	Lys	Ser 230	Arg	Glu	Gly	Arg	Ser 235	Lys	Ala	Leu	Ser	Thr 240
Cys	Ala	Ser	His	Phe 245	Leu	Ser	Val	Ser	Ile 250	Phe	Tyr	Gly	Ser	Leu 255	Leu
Tyr	Thr	Tyr	Ile 260	Arg	Pro	Ser	Ser	Ile 265	Asn	Glu	Gly	Asn	Glu 270	Asp	Ile
Pro	Val	Ala 275	Ile	Phe	Tyr	Thr	Leu 280	Val	Ile	Pro	Leu	Leu 285	Asn	Pro	Phe
Ile	Tyr	Ser	Leu	Arg	Asn	Lys	Glu	Val	Ile	Asn	Ala	Ile	Lys	Arg	Thr

290 295 300

Met Asn Lys Gly 305

<210> 1424

<211> 309

<212> PRT

<213> Mus musculus

<400> 1424

10 Phe Thr Lys His Pro Glu Met Lys Gly Leu Leu Phe Ala Val Phe Phe 25 Phe Ile Tyr Leu Ile Thr Met Ile Gly Asn Met Gly Leu Val Ile Leu 40 Ile Cys Thr Glu Arg Ser Leu His Thr Pro Met Tyr Ile Phe Leu Gly Asn Leu Ala Phe Ile Asp Ser Cys Cys Ala Cys Ala Ile Thr Pro Lys 75 70 Met Leu Glu Asn Phe Phe Ser Glu Asp Arg Ile Ile Ser Leu Tyr Glu Cys Met Ala Gln Phe Tyr Phe Leu Ser Thr Val Glu Thr Ala Asp Cys 100 105 Phe Leu Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Gln Tyr His Thr Met Met Ser Lys Leu Cys Leu Gln Met 135 140 Ile Thr Gly Ala Phe Ile Val Gly Asn Leu His Ser Met Val His Val 150 155 Gly Leu Leu Phe Arg Leu Ala Phe Cys Gly Ser Asn Gln Ile Asn His 165 170 Phe Tyr Cys Asp Ile Leu Pro Leu Tyr Arg Leu Ser Cys Val Asp Pro 185 Tyr Val Asn Glu Leu Val Leu Leu Val Phe Ser Ala Pro Ile Gln Val 200 Phe Thr Ile Ser Cys Val Leu Ile Ser Tyr Leu Phe Ile Val Tyr Thr 215 220 Ile Phe Gln Met Lys Ser Lys Glu Gly Arg Ile Lys Ala Phe Ser Thr 230 235 Cys Ala Ser His Phe Leu Ser Val Ser Leu Phe Tyr Gly Ser Leu Phe 245 250

295

Met Leu Glu Gly Asn His Thr Met Lys His Glu Phe Ile Leu Thr Gly

Leu Gln Lys Asn Lys 305

<210> 1425

<211> 321

<212> PRT

<213> Mus musculus

```
<400> 1425
Met Val Glu Glu Asn His Thr Met Lys Arg Glu Phe Val Leu Thr Gly
Phe Thr Asp His Pro Glu Met Lys Gly Leu Leu Phe Ala Val Phe Phe
                                25
Phe Ile Tyr Leu Ile Thr Met Ile Gly Asn Met Gly Leu Val Ile Leu
                            40
Ile Ser Lys Glu Arg Ser Leu His Thr Pro Met Tyr Ile Phe Leu Gly
                        55
Asn Leu Ala Phe Ile Asp Ser Cys Cys Ala Cys Ala Ile Thr Pro Lys
                    70
                                        75
Met Leu Glu Asn Phe Phe Ser Glu Asp Arg Ile Ile Ser Leu Tyr Glu
                8.5
                                    90
Cys Met Ala Gln Phe Tyr Phe Leu Cys Thr Val Glu Thr Ala Asp Cys
                                105
Phe Leu Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Gln Tyr His Thr Thr Met Ser Lys Lys Leu Cys Leu Gln Met
                        135
                                            140
Thr Thr Gly Ala Phe Ile Ala Gly Asn Leu His Ser Met Val His Val
                   150
                                       155
Gly Leu Leu Phe Arg Leu Ala Phe Cys Gly Ser Asn Gln Ile Asn His
                                   170
               165
Phe Tyr Cys Asp Ile Leu Pro Leu Tyr Arg Leu Ser Cys Val Asp Pro
           180
                               185
Tyr Ile Asn Glu Leu Val Leu Phe Val Phe Ser Gly Ser Ile Gln Val
       195
                           200
                                                205
Phe Thr Ile Gly Cys Val Leu Ile Ser Tyr Leu Phe Ile Val Tyr Thr
                       215
                                           220
Ile Phe Gln Met Lys Ser Lys Glu Gly Arg Ile Lys Ala Phe Ser Thr
                                        235
                    230
Cys Ala Ser His Phe Leu Ser Val Ser Leu Phe Tyr Gly Ser Leu Leu
                245
                                    250
Phe Met Tyr Ile Arg Pro Asn Leu Leu Glu Glu Gly Asp Lys Asp Met
                                265
Pro Ala Ala Ile Leu Phe Thr Ile Val Val Pro Leu Leu Asn Pro Phe
                           280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Val Leu Gln Lys Ile
                       295
                                            300
Leu Gln Lys Lys Ile Ile Ser Lys Asn Phe Lys Gln Ala Ser Ile Ile
305
Val
```

```
<210> 1426
<211> 317
<212> PRT
```

<400> 1426

<213> Mus musculus

Met Met Lys Ala Asn His Ser Leu Thr Val Glu Phe Ile Leu Ile Gly 1 5 10 15 Phe Ser Asp His Thr Asp Leu Lys Thr Leu Leu Phe Leu Leu Phe Ser 20 25 30 Ala Ile Tyr Leu Val Thr Ile Val Gly Asn Leu Gly Leu Val Ala Leu

```
35
                           40
Ile Tyr Met Glu Pro Arg Leu His Thr Pro Met Tyr Ile Phe Leu Gly
                       55
                                            60
Asn Leu Ala Leu Met Asp Ser Cys Cys Ser Cys Ala Ile Thr Pro Lys
Met Leu Glu Asn Phe Phe Ser Val Asp Arg Ile Ser Leu Tyr Glu
               85
                                   90
Cys Met Val Gln Phe Tyr Phe Leu Cys Leu Ala Glu Thr Ala Asp Cys
                               105
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                           120
                                                125
Pro Leu Gln Tyr His Ser Met Met Ser Lys Leu Ser Ile Gln Met
                       135
                                           140
Ser Ile Gly Thr Phe Ile Ala Ser Asn Leu His Ser Leu Ile His Thr
                  150
                                       155
Gly Cys Leu Leu Arg Leu Asn Phe Cys Lys Ser Arg Arg Ile Asp His
               165
                                    170
Phe Phe Cys Asp Ile Leu Pro Leu Tyr Lys Leu Ser Cys Thr Asp Pro
                                185
Phe Ile Asn Glu Leu Met Leu Tyr Ile Phe Ser Met Pro Ile Gln Val
                           200
                                               205
Phe Thr Ile Thr Thr Val Leu Val Ser Tyr Ser Cys Ile Leu Leu Thr
                       215
Val Phe Lys Met Lys Ser Lys Asp Gly Arg Gly Lys Thr Phe Ser Thr
                   230
                                        235
Cys Ala Ser His Phe Phe Ser Val Ser Ile Phe Tyr Ile Cys Leu Leu
               245
                                   250
Met Tyr Ile Gly Pro Ser Lys Asn Ser Asn Lys Asp Ile Pro Val Asp
           260
                               265
Val Phe Tyr Thr Ile Val Ile Pro Leu Leu Asn Pro Phe Ile Tyr Ser
                            280
Leu Arg Asn Lys Glu Val Val Asn Ala Val Lys Lys Val Met Lys Thr
                       295
His Ser Ile Phe Lys Asn Ser Ser Ala Ser Ile Ala His
                    310
<210> 1427
<211> 308
```

<210> 1427 <211> 308 <212> PRT <213> Mus musculus

<2137 Mus musculus

<400> 1427 Met Ala Glu Asn Asn Tyr Ser Val Thr Asn Glu Phe Ile Leu Val Gly Phe Ser Asp His Pro Asp Leu Lys Thr Pro Leu Phe Leu Val Phe Ser Ala Ile Tyr Leu Val Thr Met Val Gly Asn Leu Gly Leu Val Ala Leu 40 45 Ile Tyr Met Glu Pro Arg Leu His Thr Pro Met Tyr Ile Phe Leu Gly 55 Asn Leu Ala Leu Met Asp Ser Cys Cys Ser Cys Ala Ile Thr Pro Lys 70 75 Met Leu Glu Asn Phe Phe Ser Val Asp Arg Ile Ser Leu Tyr Glu 85 90 Cys Met Val Gln Phe Tyr Phe Leu Cys Leu Ala Glu Thr Thr Asp Cys 105 100 110

```
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                           120
Pro Leu Gln Tyr His Ser Met Met Ser Lys Lys Leu Cys Leu Gln Met
                        135
                                            140
Thr Met Gly Ser Tyr Ile Ala Gly Asn Leu His Pro Met Ile Glu Val
                   150
                                        155
Gly Leu Leu Arg Leu Thr Phe Cys Arg Ser His Val Ile Lys His
                                  170
Phe Phe Cys Asp Val Leu Pro Leu Tyr Arg Ile Ser Cys Thr Asp Pro
                               185
Asn Ile Asn Glu Leu Ile Leu Leu Val Leu Ala Gly Ser Ile Gln Val
       195
                           200
Phe Thr Ile Ser Ile Val Leu Val Ser Tyr Ser Cys Ile Leu Phe Thr
                       215
                                            220
Ile Phe Thr Met Lys Ser Lys Glu Gly Arg Gly Lys Ala Leu Ser Thr
                    230
                                        235
Cys Ala Ser His Phe Leu Ser Val Ser Ile Phe Tyr Gly Ser Leu Leu
                245
                                    250
Phe Met Tyr Ala Gln Pro His Ser Ala Asn Glu Gly Asp Lys Asp Met
                               265
Pro Val Ala Ile Phe Tyr Thr Leu Ile Ile Pro Leu Leu Asn Pro Phe
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile Asn Val Met Lys Lys Thr
                                            300
   290
                       295
Met Lys Arg Arg
305
```

<211> 319

<212> PRT

<213> Mus musculus

<400> 1428

Met Arg Leu Glu Lys Thr Asn His Ser Leu Thr Thr Gln Phe Ile Leu 10 Val Gly Phe Ser Asp His Pro Asp Leu Lys Thr Pro Leu Phe Leu Leu 25 Phe Ser Val Ile Tyr Leu Val Thr Met Val Gly Asn Leu Gly Leu Val 40 Ala Leu Ile Tyr Met Glu Pro Arg Leu His Thr Pro Met Tyr Ile Phe 55 Leu Gly Asn Leu Ala Leu Met Asp Ser Cys Cys Ser Cys Ala Ile Thr 70 75 Pro Lys Met Leu Glu Asn Phe Phe Ser Val Asp Arg Lys Ile Ser Leu 90 85 Tyr Glu Cys Met Ala Gln Phe Tyr Phe Leu Cys Leu Ala Glu Thr Ser 105 Asp Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile 120 125 Cys Asn Pro Leu Gln Tyr His Ser Met Met Thr Lys Lys Leu Ser Ile 135 140 Gln Met Ser Ile Gly Thr Phe Ile Ala Ser Asn Leu Ile Ser Ile Leu 150 155 His Val Gly Cys Leu Leu Arg Leu Thr Phe Cys Lys Ser Asn Arg Ile 165 170 Asp His Phe Phe Cys Asp Ile Leu Pro Leu Tyr Arg Leu Ser Cys Thr

	180							185				190			
Asp	Pro	Phe 195	Ile	Asn	Glu	Leu	Met 200	Ile	Tyr	Ile	Phe	Ser 205	Met	Pro	Ile
Gln	Phe 210	Leu	Thr	Ile	Thr	Thr 215	Val	Leu	Val	Ser	Tyr 220	Phe	Cys	Ile	Leu
Leu 225	Thr	Ile	Phe	Lys	Met 230	Lys	Ser	Lys	Asp	Gly 235	Arg	Gly	Lys	Ala	Leu 240
Ser	Thr	Cys	Ala	Ser 245	His	Phe	Phe	Ser	Val 250	Ser	Ile	Phe	Tyr	Ala 255	Cys
Leu	Leu	Met	Tyr 260	Ile	Arg	Pro	Phe	Asp 265	Asp	Ser	Asn	Lys	Asp 270	Ile	Pro
Val	Ala	Ile 275	Phe	Tyr	Thr	Ile	Ile 280	Ile	Pro	Leu	Leu	Asn 285	Pro	Phe	Ile
Tyr	Ser 290	Leu	Arg	Asn	Thr	Glu 295	Val	Val	Asn	Ala	Val 300	Lys	Lys	Val	Met
Lys 305	Ile	Tyr	Thr	Ile	Phe 310	Lys	Arg	Ser	Ser	Ala 315	Ser	Ala	Ala	His	

<211> 309

<212> PRT

<213> Mus musculus

<400> 1429

<400> 1429															
Met 1	Thr	Glu	Asp	Asn 5	Tyr	Ser	Leu	Ala	Thr 10	Glu	Phe	Ile	Leu	Ile 15	Gly
Phe	Ser	Asp	His 20	Pro	Asp	Leu	Lys	Thr 25	Leu	Leu	Phe	Leu	Val 30	Phe	Ser
Ala	Ile	Tyr 35	Leu	Val	Thr	Met	Val 40	Gly	Asn	Leu	Gly	Leu 45	Val	Thr	Leu
Ile	Tyr 50	Ile	Glu	Pro	Arg	Leu 55	His	Thr	Pro	Met	Tyr 60	Ile	Phe	Leu	Gly
Asn 65	Leu	Ala	Leu	Met	Asp 70	Ser	Cys	Суѕ	Ser	Cys 75	Ala	Ile	Thr	Pro	Lys 80
Met	Leu	Glu	Asn	Phe 85	Phe	Ser	Val	Asp	Arg 90	Arg	Ile	Ser	Leu	Tyr 95	Glu
Cys	Met	Ala	Gln 100	Phe	Tyr	Phe	Leu	Cys 105	Leu	Ala	Glu	Thr	Thr 110	Asp	Cys
Phe	Leu	Leu 115	Ala	Ala	Met	Ala	Tyr 120	Asp	Arg	Tyr	Val	Ala 125	Ile	Cys	Asn
Pro	Leu 130	Gln	Tyr	His	Ser	Met 135	Met	Ser	Lys	Lys	Leu 140	Cys	Leu	Gln	Met
Thr 145	Thr	Gly	Ala	Tyr	Ile 150	Ala	Gly	Asn	Leu	His 155	Ser	Met	Ile	His	Ile 160
Gly	Phe	Leu	Phe	Arg 165	Leu	Thr	Phe	Суѕ	Arg 170	Ser	His	Val	Ile	Lys 175	His
Phe	Phe	Cys	Asp 180	Val	Leu	Pro	Leu	Tyr 185	Arg	Leu	Ser	Cys	Val 190	Asp	Pro
Tyr	Ile	Asn 195	Glu	Leu	Met	Ile	Leu 200	Ile	Phe	Ser	Gly	Ser 205	Leu	Gln	Thr
Phe	Thr 210	Ile	Thr	Ile	Val	Leu 215	Ile	Ser	Tyr	Phe	Cys 220	Ile	Leu	Phe	Thr
Ile 225	Phe	Thr	Met	Lys	Ser 230	Arg	Glu	Gly	Arg	Arg 235	Lys	Ala	Leu	Ser	Thr 240
Cys	Ala	Ser	His	Phe 245	Leu	Ser	Val	Ser	Ile 250	Phe	Tyr	Gly	Ser	Leu 255	Leu

Tyr Met Tyr Ile Arg Pro Ser Ser Leu Asn Glu Gly Tyr Lys Asp Ile 265 Pro Val Ala Ile Phe Tyr Thr Leu Val Ile Pro Leu Leu Asn Pro Phe 280 Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile Asn Val Met Lys Arg Ala 295 Met Lys Lys Arg Leu 305 <210> 1430 <211> 307 <212> PRT <213> Mus musculus <400> 1430 Met Ala Glu Arg Asn Trp Thr Leu Val Thr Glu Phe Val Leu Thr Gly Leu Thr Glu Arg Pro Glu Leu Gln Val Pro Leu Phe Leu Val Phe Leu 25 Ile Ile Tyr Leu Thr Thr Met Val Gly Asn Leu Gly Leu Ile Ala Leu 40 Ile Trp Lys Asp Pro His Leu His Thr Pro Met Tyr Val Phe Leu Ser 55 Ser Leu Ala Phe Ala Asp Val Cys Thr Ser Ser Ser Val Thr Pro Arg 70 75 Met Leu Val Asn Phe Leu Ser Thr Asp His Glu Ile Ser Leu Val Glu 85 90 Cys Phe Thr Gln Phe Tyr Phe Phe Cys Ser Ser Ala Thr Thr Glu Cys 105 Phe Leu Leu Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Leu Tyr Pro Val Val Met Ser Asn Lys Leu Cys Thr Gln Phe 135 140 Ile Val Val Thr Tyr Phe Ile Gly Val Leu Asn Ser Thr Ile His Val 150 155 Gly Leu Leu Ile Arg Leu Thr Phe Cys Arg Ser Asn Val Ile Asp Tyr 165 170 Phe Tyr Cys Glu Ile Val Lys Leu Leu Thr Ile Ser Cys Thr Asp Pro 180 185 Ser Ile Asn Met Leu Val Val Phe Ile Cys Ser Ile Phe Ile Gln Ala 200 205 Ser Thr Leu Ala Asn Ile Val Val Ser Tyr Thr Arg Val Leu Phe Ala 215 220 Ile Leu Arg Lys Lys Ser Glu Lys Gly Arg Ser Lys Ala Phe Ser Thr 230 235 Cys Ser Ala His Leu Leu Ser Val Ser Leu Phe Tyr Gly Thr Leu Phe 250 Leu Ile Tyr Ile Leu Pro Gly Ser Glu Pro Ala Glu Asp Lys Glu Gln 265 Leu Leu Ser Ile Val Tyr Thr Ile Ile Ile Pro Leu Leu Asn Pro Phe

280

295

Ile Tyr Ser Leu Arg Asn Lys Glu Val Leu Gly Ala Leu Arg Arg Leu

285

300

290 Ile Lys Lys 305

```
<211> 308
<212> PRT
<213> Mus musculus
<400> 1431
Met Ala Glu Gly Asn Arg Thr Leu Val Thr Glu Phe Ile Leu Met Gly
                                   10
Leu Thr Asp His Pro Thr Leu Lys Ala Ala Leu Phe Pro Leu Phe Leu
           20
                                25
Val Ile Tyr Leu Ile Thr Met Val Gly Asn Leu Gly Leu Ile Ala Leu
                           40
Ile Trp Lys Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                       55
Ser Leu Ala Phe Ala Asp Ser Cys Thr Thr Ser Ser Val Thr Pro Arg
                                       75
Met Ile Leu Asn Phe Leu Ser Thr Asn His Glu Ile Thr Leu Val Glu
                                    90
Cys Phe Ala Gln Phe Tyr Phe Met Gly Ser Ser Ala Thr Thr Glu Cys
                               105
Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Asn
                          120
Pro Leu Leu Tyr Pro Val Leu Met Ser Asn Arg Leu Cys Thr Gln Phe
                       135
                                           140
Ile Ala Val Ala Tyr Leu Leu Gly Ala Leu His Leu Ala Ile His Val
                   150
                                       155
Gly Leu Leu Arg Leu Thr Phe Cys Arg Ser Asn Ile Ile Gln Tyr
               165
                                   170
Tyr Tyr Cys Glu Ile Leu Gln Leu Phe Asn Ile Ser Cys Ile Asp Pro
                               185
Thr Ile Asn Val Phe Val Leu Leu Ile Leu Ala Thr Ser Ile Gln Val
                            200
Phe Thr Phe Val Thr Val Leu Val Ser Tyr Ile Arg Val Leu Phe Ala
                        215
                                            220
Ile Leu Arg Lys Lys Ser Asp Lys Gly Arg Ser Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ser Ala His Leu Leu Ser Val Ser Leu Phe Tyr Gly Thr Leu Phe
               245
                                   250
Leu Ile Tyr Val Cys Pro Gly Ser Gly Pro Val Gly Asp Lys Glu Lys
                               265
Met Leu Ser Leu Phe Tyr Thr Val Ile Ile Pro Leu Leu Asn Pro Phe
                           280
                                            285
Val Tyr Ser Leu Arg Asn Lys Glu Val Ile Ser Ala Phe Arg Arg Val
                       295
Met Lys Asn Thr
305
<210> 1432
<211> 318
<212> PRT
<213> Mus musculus
<400> 1432
Met Thr Glu Asp Asn Tyr Ser Leu Ala Thr Glu Phe Ile Leu Thr Gly
                                    10
```

```
Phe Ser Asp Tyr Pro Asp Leu Lys Ile Leu Leu Phe Leu Val Phe Ser
Ala Ile Tyr Leu Val Thr Met Val Gly Asn Leu Gly Leu Val Ala Leu
                            40
Ile Tyr Met Glu Ser Arg Leu His Thr Pro Met Tyr Ile Phe Leu Gly
                        55
Asn Leu Ala Leu Met Asp Ser Cys Cys Ser Cys Ala Ile Thr Pro Lys
Met Leu Glu Asn Phe Phe Ser Val Asp Arg Arg Ile Ser Leu Tyr Glu
                85
Cys Met Ala Gln Phe Tyr Phe Leu Cys Leu Ala Glu Thr Ala Asp Cys
                                105
Phe Leu Leu Ala Ala Met Ala Asp Asp Arg Tyr Val Ala Ile Cys Asn
                           120
                                                125
Pro Leu Gln Tyr His Thr Met Met Ser Lys Lys Leu Cys Leu Gln Met
                        135
Thr Thr Gly Ala Tyr Ile Ala Gly Asn Ile His Ser Met Ile Gln Ile
                    150
                                        155
Gly Phe Leu Phe Arg Leu Thr Phe Cys Arg Ser His Val Ile Lys His
                165
                                    170
Phe Phe Cys Asp Val Leu Pro Leu Tyr Arg Leu Ser Cys Val Asp Pro
                               185
Tyr Ile Asn Glu Leu Met Ile Leu Ile Phe Ser Gly Ile Ala Gln Thr
                           200
                                                205
Phe Thr Ile Thr Ile Val Leu Ile Ser Tyr Phe Cys Ile Leu Phe Thr
                       215
Ile Phe Thr Met Lys Ser Arg Glu Gly Arg Arg Lys Ala Leu Ser Thr
                                       235
                   230
Cys Ala Ser His Phe Leu Ser Val Ser Ile Phe Tyr Gly Ser Leu Leu
                                    250
Tyr Met Tyr Ile Arg Pro Ser Ser Leu Asn Glu Gly Tyr Lys Asp Ile
                                265
           260
Pro Val Ala Ile Cys Tyr Thr Leu Ile Ile Pro Leu Leu Asn Pro Phe
Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile Asn Val Met Lys Glu Gln
                       295
Cys Arg Asp Asn Cys Asn Ile Leu Lys Ser Phe Phe Glu Asn
                    310
```

```
<210> 1433
```

<400> 1433

 Met
 Glu
 Lys
 Asn
 Ser
 Thr
 Leu
 Met
 Thr
 Glu
 Phe
 Val
 Leu
 Arg
 Gly
 Ile

 Thr
 Asp
 Arg
 Pro
 Glu
 Leu
 Gln
 Val
 Pro
 Leu
 Phe
 Leu
 Val
 Phe
 Phe

<211> 305

<212> PRT

<213> Mus musculus

```
85
                                    90
Phe Ala Gln Phe Tyr Phe Phe Cys Phe Ser Ala Thr Thr Glu Ile Phe
                               105
            100
Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
                            120
Leu Leu Tyr Leu Val Val Met Ser Lys Arg Leu Cys Thr Val Leu Ile
                        135
                                            140
Ser Leu Ser Tyr Ile Ile Gly Val Leu Asn Pro Ile Val His Val Gly
                   150
                                        155
Leu Leu Phe Arg Leu Thr Phe Cys Lys Ser Asn Val Ile Asp His Phe
                                   170
               165
Tyr Cys Glu Ile Met Pro Leu Tyr Ala Ile Ser Cys Thr Asp Pro Ser
           180
                                185
                                                    190
Leu Asn Gly Leu Val Ala Phe Ile Phe Ala Ser Ser Ile Gln Ile Ser
                            200
                                                205
Thr Ser Val Thr Ile Val Val Ser Tyr Ala Arg Val Leu Phe Ala Val
                        215
Leu Asn Met Lys Ser Glu Arg Gly Arg Arg Lys Ala Phe Phe Thr Cys
                    230
                                        235
Ser Ala His Leu Leu Ser Val Ser Leu Phe Tyr Gly Thr Leu Leu Phe
                                    250
                245
Met Tyr Val Ser Pro Gly Ser Gly Ser Gly Lys Gln Lys Asp Lys Met
                                265
Tyr Ser Leu Phe Tyr Thr Val Val Ile Pro Leu Leu Asn Pro Phe Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Leu Gly Ala Leu Lys Lys Leu Ile
Lys
305
<210> 1434
<211> 306
<212> PRT
<213> Mus musculus
<400> 1434
Met Glu Lys Asn Ser Thr Leu Leu Thr Glu Phe Val Leu Arg Gly Ile
                                    1.0
Thr Asp Arg Ser Glu Leu Gln Val Pro Leu Leu Leu Val Phe Phe Leu
                                25
Ile Tyr Val Thr Thr Met Val Gly Asn Leu Gly Leu Ile Phe Leu Ile
                            40
                                                 45
Trp Lys Asp Pro His Leu His Thr Pro Met Tyr Leu Phe Leu Gly Asn
Leu Ala Phe Ala Asp Ala Cys Ile Ser Thr Thr Val Thr Pro Lys Met
                                        75
Leu Met Lys Phe Leu Asn Lys Asn Asp Met Ile Ser Val Gly Glu Cys
Phe Ala Gln Tyr Tyr Phe Phe Cys Ile Ser Ala Thr Thr Glu Ile Phe
```

105 Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro 120

Leu Leu Tyr Leu Val Val Met Ser Lys Arg Leu Cys Thr Val Leu Ile

Ser Ile Ser Tyr Ile Ile Gly Phe Val Asn Cys Gly Leu Asn Ile Gly

135

150

125

155

100

145

```
Leu Leu Phe Arg Leu Thr Phe Cys Lys Ser Asn Ile Ile Asp His Phe
                165
                                    170
Tyr Cys Glu Ile Leu Gln Leu Tyr Thr Ile Ser Cys Thr Asp Pro Ser
                                185
                                                    190
Leu Asn Thr Leu Val Val Phe Ile Cys Ala Ser Ser Ile Gln Ile Ser
                            200
                                                205
Thr Ser Val Thr Ile Ile Val Ser Tyr Ala Arg Val Leu Phe Ala Val
                       215
Leu Asn Met Lys Ser Glu Arg Gly Arg Arg Lys Ala Phe Phe Thr Cys
                    230
                                        235
Ser Ala His Leu Leu Ser Val Ser Leu Phe Tyr Gly Thr Leu Leu Phe
               245
                                   250
Met Tyr Val Ser Pro Gly Ser Gly Ser Gly Lys Gln Lys Asp Lys Ile
           260
                               265
Tyr Ser Leu Phe Tyr Thr Val Val Ile Pro Leu Leu Asn Pro Phe Ile
                           280
Tyr Ser Leu Arg Asn Lys Glu Val Leu Gly Ala Leu Lys Lys Phe Ile
                        295
                                            300
Lys Cys
305
```

<211> 315

<212> PRT

<213> Mus musculus

<400> 1435

Met Leu Thr Gly Lys Ser Val Leu Asn Gln Ser Gly Thr Thr Glu Phe 10 Val Phe Arg Val Phe Thr Thr Val Pro Glu Phe Gln Ala Leu Leu Phe 25 Leu Leu Phe Leu Leu Tyr Leu Met Ile Leu Cys Gly Asn Ala Ala 40 Ile Ile Trp Val Val Cys Thr His Ser Ala Leu His Thr Pro Met Tyr 55 Phe Phe Leu Ser Ser Leu Ser Val Leu Glu Ile Phe Tyr Thr Thr Asp 70 75 Val Val Pro Leu Met Leu Ser Asn Ile Phe Gly Ala Gln Lys Pro Ile 8.5 90 Ser Leu Ala Gly Cys Gly Thr Gln Met Phe Phe Phe Val Thr Leu Gly 100 105 Ser Thr Asp Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val 115 120 125 Ala Ile Cys His Pro Leu His Tyr Ser Leu Ile Met Thr Lys Lys Leu 135 140 Cys Val Gln Met Val Met Gly Ser Trp Ser Leu Ala Leu Phe Leu Ser 150 155 Leu Gln Leu Thr Ala Leu Ile Phe Thr Leu Pro Phe Cys Gly His Asp 165 170 Gln Glu Ile Asn His Phe Leu Cys Asp Val Pro Pro Val Leu Arg Leu 180 185 Ala Cys Ala Asp Ile His Val His Gln Ala Val Leu Tyr Val Val Gly 200 205 Ile Leu Val Leu Thr Val Pro Phe Leu Leu Ile Cys Ile Ser Tyr Val 215 Phe Ile Ala Ser Thr Ile Leu Arg Met Arg Ser Ala Glu Gly Arg Gln

```
225
                   230
                                       235
Arg Ala Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Leu Leu Gln
               245
                                    250
Tyr Gly Cys Cys Ser Leu Val Tyr Leu Arg Pro Arg Ser Ser Thr Ser
            260
                                265
Glu Asp Glu Asp Arg Gln Ile Ala Leu Val Tyr Thr Phe Val Thr Pro
                            280
Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly
                       295
Ala Leu Lys Asn Ser Ile Phe His Lys Ala Val
                    310
<210> 1436
<211> 317
<212> PRT
<213> Mus musculus
<400> 1436
Met Asn Met Asp Gln Gly Asn Gln Thr Ser Ile Ser Glu Phe Ile Leu
                                    10
Leu Gly Leu Ser Asn Gln Ala Glu Lys Gln Lys Leu Ile Phe Val Ile
                                25
Phe Leu Ser Met Tyr Leu Val Thr Val Ile Gly Asn Ser Leu Ile Ile
                            40
Leu Ala Ile Gly Leu Asp Ile His Leu His Thr Pro Met Tyr Leu Phe
                        55
Leu Ala Asn Leu Ser Phe Ala Asp Ile Ser Ser Ser Ser Thr Ser Val
                   70
                                        75
Pro Lys Met Leu Met Asn Ile Gln Thr Asn Ser Gln Ser Ile Ser Tyr
               85
                                    90
Glu Gly Cys Ile Thr Glm Met Tyr Phe Ser Ile Val Phe Val Val Ile
            100
                                105
Asp Asn Phe Leu Leu Gly Val Met Ala Tyr Asp Arg Tyr Val Ala Ile
                            120
                                                125
Cys His Pro Leu Asn Tyr Thr Asn Ile Met His Pro Arg Phe Cys Leu
                       135
                                           140
Leu Leu Ser Phe Cys Pro Trp Ala Leu Ser Asn Ile Val Ala Leu Thr
                   150
                                        155
His Thr Leu Leu Ala Asn Gln Leu Ile Phe Cys Asn His Asn Thr Ile
               165
                                    170
Gln His Phe Phe Cys Asp Leu Ala Pro Leu Ile Lys Leu Ser Cys Ser
           180
                                185
Asp Ala Met Ile Asn Glu Leu Val Lys Phe Val Val Gly Leu Ser Val
                           200
Ile Thr Phe Pro Phe Ala Leu Ile Leu Phe Ser Tyr Val Cys Ile Ile
                        215
Arg Asp Val Leu Arg Ile Ser Ser Thr Glu Gly Lys Trp Lys Ala Phe
                   230
                                        235
Ser Thr Cys Gly Ser His Leu Thr Ile Val Phe Leu Phe Tyr Gly Thr
                245
                                    250
Ile Val Gly Val Tyr Phe Phe Pro Ser Ser Thr His Pro Glu Asp Thr
                                265
Asp Lys Ile Gly Ala Val Leu Phe Thr Val Val Thr Pro Met Leu Asn
                           280
                                                285
```

Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Arg

300

295

<210> 1437 <211> 310 <212> PRT <213> Mus musculus <400> 1437 Met Gly Gly Asn Gln Thr Leu Ile Thr Gln Phe Ile Leu Leu Gly Phe 10 Pro Leu Ser Pro Arg Met Gln Met Leu Leu Phe Ala Leu Phe Ser Leu 20 25 Phe Tyr Ala Phe Thr Leu Leu Gly Asn Gly Thr Ile Leu Gly Leu Ile Cys Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser His 55 Leu Ala Ile Val Asp Ile Ala Tyr Ala Cys Asn Thr Val Pro Gln Met 75 Leu Val Asn Leu Met Asp Pro Ala Lys Pro Ile Ser Phe Ala Gly Cys 85 90 Met Thr Gln Thr Phe Leu Phe Leu Thr Phe Ala His Thr Glu Cys Leu 100 105 110 Leu Leu Val Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His Pro 120 Leu Arg Tyr Thr Ala Ile Met Ser Trp Arg Val Cys Val Ile Leu Val 135 140 Leu Thr Ser Trp Ile Leu Gly Val Leu Leu Ala Leu Val His Leu Val 150 155 Leu Leu Pro Leu Pro Phe Cys Gly Ser Gln Lys Val Asn His Phe 165 170 Phe Cys Glu Ile Ile Ala Val Leu Lys Leu Ala Cys Ser Asp Thr Arg 185 Ile Asn Glu Leu Met Val Leu Ala Gly Ala Val Ser Val Leu Val Gly 200 205 Pro Phe Ser Ser Ile Val Val Ser Tyr Ala His Ile Leu Cys Ala Ile 215 Leu Lys Ile Lys Ser Gln Gln Gly Arg Gln Lys Ala Phe Ser Thr Cys 230 235 Ser Ser His Leu Cys Val Val Gly Leu Phe Tyr Gly Thr Ala Ile Val 245 250 Met Tyr Ile Gly Pro Gln His Gly Lys Ser Asn Glu Gln Lys Lys Tyr 260 265 Leu Leu Phe His Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile 280 Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Leu Lys Arg Thr Leu 295 Leu Lys Glu Asp Thr Ser 305 310

<210> 1438 <211> 313 <212> PRT

<213> Mus musculus

```
<400> 1438
Met Lys Arg Asp Asn Ala Thr Trp Val Ser Glu Phe Ile Leu Met Gly
Leu Ser Ser Asp Lys His Ile Gln Ala Gly Leu Phe Val Leu Phe Gly
Val Ile Tyr Leu Leu Thr Leu Leu Gly Asn Gly Leu Ile Val Leu Leu
                            40
Ile Ala Leu Asp Pro Arg Leu His Leu Pro Met Tyr Phe Phe Leu Cys
                       55
His Leu Ser Val Val Asp Ile Cys Tyr Thr Ser Ser Gly Val Pro Gln
                                        75
Met Leu Ala His Phe Leu Met Glu Lys Lys Thr Ile Ser Phe Ala Leu
               85
                                    90
Cys Gly Thr Gln Leu Phe Phe Ala Leu Thr Leu Gly Gly Thr Glu Phe
           100
                               105
Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asn
                            120
Pro Leu Arg Tyr Thr Val Val Met Asn Pro Arg Leu Cys Met Gly Leu
                        135
Ala Gly Val Ser Trp Phe Val Gly Val Val Asn Ser Ala Val Glu Thr
                    150
                                        155
Ala Val Thr Met Ser Leu Pro Thr Cys Gly His Asn Val Leu Asn His
                165
                                    170
Val Ala Cys Glu Thr Leu Ala Leu Val Arg Leu Ala Cys Val Asp Ile
                                185
Thr Leu Asn Gln Val Val Ile Leu Ala Ser Ser Val Val Val Leu Leu
                            200
                                                205
Val Pro Cys Ser Leu Val Ser Leu Ser Tyr Ala His Ile Val Ala Ala
                        215
                                            220
Ile Met Lys Ile Arg Ser Thr Gln Gly Arg Arg Lys Ala Phe Glu Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Val Val Ser Met Ser Tyr Gly Met Ala Leu
                245
                                    250
Phe Thr Tyr Met Gln Pro Arg Ser Thr Ala Ser Ala Glu Gln Asp Lys
                                265
Leu Val Val Leu Phe Tyr Ala Val Val Thr Pro Met Leu Asn Pro Leu
                           280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ala Ala Phe Ser Arg Val
                       295
Leu Met Lys Asn Ile Glu Ser Lys Asn
                    310
<210> 1439
<211> 317
<212> PRT
<213> Mus musculus
<400> 1439
Met Glu Thr Asn Asn Glu Thr Gln Leu His Glu Phe Ile Leu Leu Glv
                                    10
Leu Ser Ser Asp Trp Asp Ser Gln Val Ser Leu Phe Val Leu Phe Leu
```

Leu Met Tyr Leu Val Thr Val Leu Gly Asn Phe Leu Ile Ile Val Leu 35 40 45 Ile Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Thr

```
Asn Leu Ser Leu Val Asp Ala Ser Tyr Ala Thr Ser Ile Val Pro Gln
                   70
                                       75
Leu Leu Ala His Phe Leu Ala Thr His Lys Ala Ile Pro Phe Leu Ser
                                   90
               85
Cys Ala Ala Gln Leu Phe Phe Ser Leu Gly Leu Gly Gly Ile Glu Phe
                               105
Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asp
                           120
Pro Leu Arg Tyr Ser Val Ile Met His Ala Gly Leu Cys Thr Arg Leu
                       135
                                          140
Val Ile Thr Ser Trp Val Ser Gly Ser Ile Asn Ser Leu Val His Thr
                                       155
                   150
Ala Ile Thr Phe Gln Leu Pro Met Cys Thr Asn Lys Tyr Ile Asp His
                                  170
               165
Ile Ala Cys Glu Thr Leu Ala Val Arg Leu Ala Cys Val Asp Thr
                               185
Ser Ser Asn Lys Ile Ala Ile Met Val Ser Ser Ile Val Leu Leu Met
                                               205
                           200
Thr Pro Phe Phe Leu Val Leu Leu Ser Tyr Ile Gln Ile Ile Ser Thr
                       215
                                           220
Ile Leu Lys Ile Gln Ser Thr Glu Gly Arg Trp Lys Ala Phe His Thr
                   230
                                       235
Cys Ala Ser His Leu Thr Met Val Val Leu Cys Tyr Gly Met Ala Ile
                                   250
               245
Phe Thr Tyr Ile Gln Pro His Ser Ser Pro Ser Val Leu Gln Glu Lys
                               265
Leu Met Ser Leu Phe Tyr Ala Ile Leu Thr Pro Met Leu Asn Pro Met
                                               285
                           280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Trp Gln Lys Leu
                       295
Leu Gly Lys Phe Ser Gly Phe Ala Ser Lys Leu Ala Thr
                   310
```

<211> 304

<212> PRT

<213> Mus musculus

<400> 1440

Met Ala Arg Glu Asn Asn Val Thr Glu Leu Ile Ile Thr Gly Leu Phe 10 Gln Asp Pro Asn Val Gln Lys Val Cys Phe Val Leu Phe Leu Pro Val 25 Tyr Leu Ala Thr Val Leu Gly Asn Gly Leu Ile Val Ala Met Val Ile 40 Val Ser Lys Ser Leu His Ser Pro Met Tyr Ile Phe Leu Ser Ser Leu 55 Ser Leu Val Glu Ile Cys Tyr Ser Ser Thr Val Val Pro Lys Phe Ile 75 70 Thr Asp Leu Leu Ala Lys Val Lys Thr Ile Ser Leu Lys Gly Cys Leu 85 90 Ala Gln Ile Phe Phe Phe His Phe Leu Gly Val Ala Glu Ile Phe Leu 100 105 Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 His Tyr Met Asn Ile Met Ser Arg Gln Val Cys His Val Leu Val Ala

```
130
                      135
Val Ser Trp Leu Gly Gly Phe Leu His Ser Ile Ile Gln Val Leu Ile
                   150
                                       155
Ser Ile Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe
               165
                                    170
Cys Asp Leu Gln Pro Leu Phe Lys Leu Ala Cys Thr Asp Thr Phe Val
           180
                               185
Glu Ser Val Ile Val Met Ala Asn Ser Gly Leu Ile Ala Leu Cys Ser
                           200
                                                205
Phe Leu Val Leu Val Ser Ser Tyr Val Ile Ile Leu Val Asn Leu Arg
                       215
                                            220
Lys His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ala Ser
                   230
                                       235
His Ile Thr Val Val Leu Phe Phe Gly Pro Ala Ile Phe Leu Tyr
                                    250
Met Arg Pro Ser Ser Thr Phe Thr Glu Asp Lys Leu Val Ala Val Phe
           260
                                265
Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Ile Ile Tyr Thr Leu Arg
                           280
                                                285
Asn Ala Glu Val Lys Asn Ala Val Arg Lys Leu Trp Gly Lys Arg Ile
                       295
<210> 1441
<211> 305
```

<212> PRT

<213> Mus musculus

<400> 1441

Met Ala Asn Lys Asn Asn Val Thr Glu Leu Ile Phe Thr Gly Leu Phe 10 Gln Asp Pro Glu Val Gln Lys Val Cys Phe Val Leu Phe Leu Pro Val 25 Tyr Leu Ala Thr Leu Leu Gly Asn Ser Leu Ile Leu Val Ala Val Ser 40 Ile Ser Lys Thr Leu His Ser Pro Met Tyr Phe Phe Leu Ser Ser Leu 55 Ser Leu Val Glu Ile Cys Tyr Ser Ser Thr Ile Val Pro Lys Phe Ile 70 75 Thr Asp Leu Leu Ala Lys Val Lys Thr Ile Ser Leu Lys Gly Cys Leu 85 Thr Gln Ile Phe Phe Ser His Phe Phe Gly Val Val Glu Val Ile Leu 100 105 Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 His Tyr Met Asn Ile Met Ser Arg Gln Val Cys His Met Leu Val Ala 130 135 Gly Ser Trp Leu Gly Gly Phe Ile His Ser Ile Ile Gln Ile Ile Ile 150 155 Thr Ile Pro Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe 170 Cys Asp Leu Gln Gln Leu Phe Lys Leu Ala Cys Thr Asp Thr Phe Met 180 185 190 Glu Gly Phe Ile Val Met Ala Asn Ser Gly Leu Ile Ser Ile Val Ser 200 205 Leu Phe Ile Leu Val Ser Ser Tyr Ala Val Ile Leu Ile Ser Leu Arg 210 215 220

```
Lys Arg Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ala Ser
                    230
                                        235
His Ile Thr Val Val Ile Leu Phe Phe Val Pro Gly Ala Phe Ile Tyr
                                    250
                245
Met Arg Pro Ser Ser Thr Phe Thr Glu Asp Lys Leu Val Ser Val Phe
                                265
            260
Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Ile Val Tyr Thr Leu Arg
                           280
                                                285
Asn Thr Glu Met Lys Asn Ala Ile Arg Met Ser Trp Lys Gln Lys Asp
                        295
                                            300
Ser
305
<210> 1442
<211> 306
<212> PRT
<213> Mus musculus
<400> 1442
Met Glu Pro Arg Asn Asn Val Thr Tyr Phe Val Leu Leu Gly Leu Ser
                                    10
Glu Asn Pro Lys Val Gln Lys Gly Leu Phe Val Leu Phe Leu Leu Ser
            20
                                25
Tyr Val Leu Thr Met Val Gly Asn Leu Leu Ile Val Met Thr Val Thr
Thr Ser Asn Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Ser Leu
                        55
                                            60
Ser Phe Val Asp Ile Ile Tyr Ser Ser Ala Ile Ser Pro Lys Leu Ile
Ser Asp Leu Phe Phe Gly Gln Asn Thr Ile Ser Phe Lys Phe Cys Met
                                    90
Thr Gln Leu Phe Thr Glu His Phe Phe Gly Gly Ser Glu Val Phe Leu
            100
                                105
Leu Leu Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                           120
                                                125
His Tyr Ser Thr Ile Met Lys Gln Trp Val Cys Val Val Leu Leu Ile
                        135
                                            140
Leu Ser Trp Ile Gly Gly Phe Leu His Ser Val Ile Gln Leu Ser Thr
                                        155
                    150
Ile Tyr Gly Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Phe Met
                                    170
                165
Cys Asp Met Tyr Pro Leu Leu Lys Leu Val Cys Ile Asp Thr Tyr Val
                                185
Ile Gly Leu Leu Val Met Ala Asn Gly Gly Leu Ile Cys Thr Val Val
                            200
Phe Ile Leu Leu Ile Ser Tyr Gly Val Ile Leu Tyr Ser Leu Lys
                        215
                                            220
Asn Leu Asn Gln Glu Gly Arg Trp Lys Ala Leu Ser Thr Cys Gly Ser
                    230
                                        235
His Ile Thr Val Val Val Ser Phe Phe Val Pro Cys Ile Phe Met Tyr
                245
                                    250
Ala Arg Pro Ala Lys Thr Phe Pro Ile Asp Lys Met Leu Ser Val Phe
```

265

Tyr Thr Val Ile Thr Pro Met Met Asn Pro Leu Ile Tyr Thr Leu Arg 275 280 285

Asn Ser Glu Met Thr Asn Ala Met Lys Lys Leu Trp Arg Arg Lys Ile

260

Ile Ser 305

<210> 1443

<211> 309 <212> PRT

<213> Mus musculus

<400> 1443

Met Glu Asn Gln Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr 1 5 10 15 Glu Asn Pro Lys Met Gln Lys Ile Val Phe Ile Met Phe Phe Leu Ile

Glu Asn Pro Lys Met Gln Lys Ile Val Phe Ile Met Phe Phe Leu Ile 20 25 30

Tyr Ile Ile Ser Ile Thr Gly Asn Val Leu Ile Val Val Thr Ile Thr 35 40 45

Ser Thr Ser Leu Leu Glu Ser Pro Met Tyr Phe Phe Leu Ala Tyr Leu 50 55 60

Ser Phe Ile Asp Ala Cys Tyr Ser Ser Val Ser Thr Pro Lys Leu Ile 65 70 75 80

Ala Asp Ser Leu Cys Glu Lys Lys Thr Ile Pro Phe Asn Gly Cys Met 85 90 95

Thr Gln Ile Phe Gly Glu His Leu Phe Gly Gly Ala Glu Ile Ile Leu $100 \hspace{1.5cm} 105 \hspace{1.5cm} 110$

Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 115 120 125

His Tyr Ala Thr Ile Met Ser Arg Arg Leu Cys Ser Leu Leu Val Gly 130 135 140

Val Ser Trp Leu Gly Gly Phe Leu His Ala Thr Ile Gln Ile Leu Phe 145 150 155 160

Ile Phe Gln Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Phe Met 165 \sim 170 175

Cys Asp Leu Asn Pro Leu Leu Asn Leu Val Cys Thr Asp Thr His Thr 180 185 190

Leu Gly Ile Phe Val Ala Ala Asn Ser Gly Phe Ile Cys Leu Leu Asn 195 200 205

Phe Leu Leu Leu Val Ser Tyr Val Ala Ile Leu Arg Ser Leu Lys 210 215 220

Asn His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ile Ser 225 230 235 240

His Ile Thr Val Val Val Leu Phe Phe Val Pro Cys Ile Phe Val Tyr
245 250 255

Met Arg Pro Val Ala Thr Leu Pro Ile Asp Lys Ala Val Ala Met Phe 260 265 270

Tyr Thr Met Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg 275 280 285

Asn Ala Gln Met Lys Asp Ala Ile Lys Lys Leu Gly Ser Thr Lys Ile 290 295 300

Leu Ser Ser Asn Lys

305

<210> 1444

<211> 310

<212> PRT

<213> Mus musculus

```
<400> 1444
Met Lys Gln Ile Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
Gln Asn Pro Asp Val Gln Lys Leu Leu Val Ile Phe Ala Leu Ile
                               25
Tyr Ser Leu Thr Leu Ile Gly Asn Leu Leu Ile Ile Val Thr Val Ile
Ser Ser Pro Thr Leu Gly Ser Pro Met Tyr Phe Phe Leu Ser Phe Leu
                       55
Ser Phe Val Asp Gly Cys Cys Ser Ser Thr Met Ala Pro Lys Met Ile
                                       75
Phe Asp Leu Leu Ala Glu Arg Lys Thr Ile Ser Phe Asn Gly Cys Met
               85
                                   90
Thr Gln Ile Phe Ala Glu His Phe Phe Gly Gly Val Glu Ile Ile Leu
                               105
Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                           120
His Tyr Met Ile Thr Met Asn Arg Arg Val Cys Gly Phe Leu Val Ser
                       135
                                           140
Thr Ala Trp Ala Gly Gly Phe Leu His Ala Leu Ile Gln Ile Leu Phe
                  150
                                       155
Met Val Trp Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Phe Ile
              165
                                   170
Cys Asp Leu Phe Pro Leu Leu Lys Leu Ser Cys Thr Asp Asn His Ile
                              185
                                                  190
Phe Gly Leu Phe Val Ala Ala Asn Ser Gly Leu Met Cys Met Leu Ile
                          200
                                               205
Phe Ser Ile Leu Leu Thr Ser Tyr Val Leu Ile Phe Cys Ser Leu Lys
                       215
Thr His Ser Thr Glu Glu Gln Leu Lys Ala Leu Ser Thr Cys Ala Ser
                   230
                                        235
His Ile Thr Val Val Leu Leu Phe Phe Val Pro Cys Ile Phe Val Tyr
               245
                                    250
Leu Arg Pro Met Val Ile Phe Pro Phe Asp Lys Ala Val Ala Val Phe
                               265
Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                           280
Asn Thr Glu Val Lys Asn Ala Met Arg Lys Leu Trp Asn Gln Arg Lys
                      295
Pro Gly Lys Arg Phe Thr
305
<210> 1445
```

<210> 1445 <211> 308 <212> PRT <213> Mus musculus

<400> 1445

 Met Ala Asn Lys Asn Asn Ile Thr Glu Leu Ile Phe Thr Gly Leu Phe

 1
 5
 10
 15

 Gln Asp Pro Glu Val Gln Lys Val Cys Phe Val Leu Phe Leu Pro Val 20
 25
 30

 Tyr Leu Ala Thr Leu Leu Gly Asn Ser Leu Ile Val Val Ala Val Ser 35
 40
 45

 Ile Ser Lys Thr Leu His Ser Pro Met Tyr Phe Phe Leu Ser Ser Leu

```
55
Ser Leu Val Glu Ile Cys Tyr Ser Ser Thr Ile Val Pro Lys Phe Ile
                                       75
Thr Asp Leu Leu Val Lys Val Lys Thr Ile Ser Leu Lys Gly Cys Leu
               85
Ala Gln Ile Phe Phe Ser His Phe Leu Gly Val Ala Glu Ile Leu Leu
                               105
Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                           120
His Tyr Met Asn Ile Met Ser Arg Gln Val Cys His Met Leu Val Gly
                       135
Gly Ser Trp Leu Gly Gly Leu Ile His Ser Ile Ile Gln Ile Ile Ile
                   150
                                       155
Thr Ile Pro Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe
                                   170
Cys Asp Leu Gln Pro Leu Phe Lys Leu Ala Cys Thr Asp Thr Phe Met
                               185
Glu Gly Val Val Met Ala Asn Ser Gly Leu Ile Ser Ile Ile Ser
        195
                           200
Leu Phe Ile Leu Val Ser Ser Tyr Ala Ile Ile Leu Ile Ser Leu Arg
                       215
                                           220
Lys His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ala Ser
                    230
                                        235
His Ile Thr Val Val Ile Leu Phe Phe Gly Pro Ala Thr Phe Leu Tyr
               245
                                    250
Leu Arg Pro Ser Ser Ser Phe Thr Glu Asp Lys Leu Val Ala Val Phe
          260
                               265
Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Ile Ile Tyr Thr Leu Arg
                           280
                                               285
Asn Ala Glu Val Lys Asn Ala Met Lys Lys Leu Trp Gly Lys Arg Asn
                       295
Pro Glu Thr Glu
305
<210> 1446
<211> 309
<212> PRT
<213> Mus musculus
<400> 1446
Met Ala Ala Ser Asn Val Thr Glu Ile Ile Phe Leu Gly Leu Ser
                                    10
```

 Met Ala Ala Ala Ser Asn Val Thr Glu Ile Ile Phe Leu Gly Leu Ser 1
 5
 10
 15

 Gln Tyr Gln His Val Gln Lys Val Ile Phe Val Met Phe Leu Leu Met 20
 25
 30
 7

 Tyr Thr Ala Ile Val Leu Gly Asn Gly Leu Ile Val Val Thr Ile Val 35
 40
 45
 45

 Ala Ser Lys Gly Leu Ser Ser Pro Met Tyr Phe Phe Leu Gly Tyr Leu 50
 55
 60
 60

 Ser Phe Val Glu Val Cys Tyr Cys Ser Val Thr Ala Pro Lys Leu Ile 75
 80

 Phe Asp Ser Leu Leu Gln Arg Lys Ala Ile Ser Leu Gln Gly Cys Ile 85
 90
 95

 Thr Gln Ile Phe Phe Leu His Phe Phe Gly Gly Thr Glu Ile Phe Leu 100
 105
 110

 Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 125
 120

```
His Tyr Val Thr Ile Met Asn Arg Arg Val Cys Gly Leu Leu Val Gly
                        135
Ala Ala Trp Ser Gly Gly Leu Leu His Ser Ala Gly Gln Thr Phe Leu
                    150
                                        155
Ile Phe Gln Leu Pro Phe Cys Gly Pro Asn Ile Ile Asn His Tyr Phe
                                    170
                165
                                                        175
Cys Asp Val His Pro Val Leu Lys Leu Ala Cys Ser Asp Thr Phe Leu
                               185
Ile Ser Leu Leu Val Ile Ile Asn Gly Gly Ser Ile Ser Val Ile Ser
        195
                            200
                                                205
Phe Ala Val Leu Leu Ala Ser Tyr Val Val Ile Leu Asn Ser Leu Arg
                        215
                                            220
Ser His Thr Ala Glu Gly Arg His Lys Ala Leu Ser Thr Cys Ala Ser
                    230
                                        235
His Leu Ala Val Val Gly Leu Phe Phe Ile Pro Cys Ser Phe Val Tyr
                245
                                    250
Met Arg Pro Cys Ile Thr Phe Pro Val Asp Lys Val Val Ala Val Phe
                                265
Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Ile Ile Tyr Ser Phe Arg
                           280
                                                285
Asn Thr Glu Val Lys Asn Ala Met Lys Arg Leu Val Gly Arg Lys Val
Thr Trp Glu Glu Lys
305
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1447

Met Glu Ile Arg Ser Asn Val Thr Glu Phe Val Leu Leu Gly Leu Thr 10 Arg Asn Pro Ser Met Gln Lys Ile Val Phe Ala Val Phe Val Val Ile 25 Tyr Ile Ile Ser Met Val Gly Asn Val Leu Ile Val Val Thr Ile Thr 40 Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Tyr Leu 55 Ser Phe Ile Asp Ala Cys Tyr Ser Ser Val Asn Thr Pro Lys Leu Ile 70 75 Ile Asp Ser Leu His Glu Lys Lys Thr Ile Leu Phe Asn Gly Cys Met 90 Thr Gln Val Phe Gly Glu His Phe Phe Gly Gly Ala Glu Gly Ile Leu 100 105 Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Thr Thr Ile Met Ser Arg Arg Val Cys Gly Leu Leu Val Gly 135 140 Val Val Trp Val Gly Gly Phe Leu His Ala Thr Ile Gln Ile Leu Phe 150 155 Ile Phe Lys Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Met 170 165 Cys Asp Leu Asn Pro Leu Leu Asn Leu Ala Cys Thr Asp Thr His Ile 185 Leu Gly Leu Phe Val Ala Ala Asn Ser Gly Phe Ile Cys Leu Leu Asn

```
195
                          200
Phe Leu Leu Leu Val Ser Tyr Val Val Ile Leu Arg Ser Leu Arg
                                         220
                      215
Asn His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Val Ser
                  230
                                     235
His Ile Thr Val Val Leu Phe Phe Val Pro Cys Ile Phe Val Tyr
           245
                                250
Met Arg Pro Ser Ala Thr Leu Ser Ile Asp Lys Ala Val Ala Val Phe
          260
                             265
Tyr Thr Met Ile Thr Pro Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg
               280
Asn Ala Gln Met Lys Asp Ala Ile Lys Lys Leu Cys Arg Trp Lys Asp
                     295
                                     300
Asp Val Ile Ser Ile Asn Lys
<210> 1448
```

<211> 310 <212> PRT

<213> Mus musculus

<400> 1448															
Met 1	Asn	Asp	Thr	Glu 5	His	Met	Glu	Asn	Lys 10	Arg	Asn	Val	Thr	Glu 15	Phe
Ile	Leu	Ile	Gly 20	Leu	Thr	Gln	Asn	Pro 25	Gln	Met	Gln	Lys	Val 30	Val	Phe
Val	Thr	Phe 35	Leu	Leu	Leu	Tyr	Met 40	Ile	Thr	Ile	Ser	Gly 45	Asn	Leu	Leu
Ile	Val 50	Val	Thr	Ile	Ile	Asn 55	Ser	Gln	Ala	Leu	Asn 60	Ser	Pro	Met	Tyr
Phe 65	Phe	Leu	Ser	His	Leu 70	Ser	Leu	Ile	Asp	Thr 75	Ile	Tyr	Thr	Ser	Ser 80
Ser	Ala	Pro	Lys	Leu 85	Ile	Ala	Asp	Ser	Leu 90	Gln	Glu	Asn	Lys	Val 95	Ile
Ser	Phe	Asn	Gly 100	Cys	Met	Ala	Gln	Val 105	Tyr	Ala	Glu	His	Ile 110	Phe	Gly
Ala	Thr	Glu 115	Ile	Ile	Leu	Leu	Thr 120	Val	Met	Ala	Tyr	Asp 125	Arg	Tyr	Val
Ala	Ile 130	Cys	Lys	Pro	Leu	His 135	Tyr	Met	Thr	Ile	Met 140	Ser	His	Lys	Leu
Cys 145	Ile	Leu	Leu	Val	Gly 150	Val	Ala	Trp	Thr	Gly 155	Gly	Phe	Leu	His	Ala 160
Thr	Ile	Gln	Ile	Leu 165	Phe	Thr	Val	Trp	Leu 170	Pro	Phe	Cys	Gly	Pro 175	Asn
Ile	Ile	Asp	His 180	Phe	Met	Cys	Asp	Leu 185	Tyr	Pro	Leu	Leu	Glu 190	Leu	Val
Cys	Met	Asp 195	Thr	His	Thr	Leu	Gly 200	Leu	Phe	Val	Ala	Ala 205	Asn	Ser	Gly
Phe	Ile 210	Cys	Leu	Phe	Asn	Phe 215	Leu	Leu	Leu	Met	Gly 220	Ser	Tyr	Val	Ile
Ile 225	Leu	Arg	Ser	Leu	Lys 230	Asn	Tyr	Ser	Leu	Glu 235	Gly	Arg	Arg	Lys	Ala 240
Leu	Ser	Thr	Cys	Val 245	Ser	His	Ile	Thr	Val 250	Val	Val	Leu	Ser	Phe 255	Ile
Pro	Cys	Ile	Phe 260	Val	Tyr	Leu	Arg	Pro 265	Val	Thr	Thr	Leu	Pro 270	Ile	Asp

<400> 1449 Met Asn Asn Ile Thr Glu Phe Ile Leu Val Gly Leu Thr Gln Asn Met Glu Leu Gln Ile Phe Ser Phe Val Val Phe Phe Ile Val Tyr Leu Leu 25 Thr Leu Ala Gly Asn Leu Leu Ile Met Val Thr Ile Ser Ser Lys 40 Ala Leu Gly Ser Pro Met Tyr Phe Phe Leu Ser Phe Leu Ser Leu Ile 55 Asp Gly Cys Cys Ser Ser Ser Met Thr Pro Lys Met Leu Ala Asp Ser 70 75 Leu Ser Val Arg Lys Thr Ile Ser Phe Ser Gly Cys Met Thr Gln Val 85 90 Phe Ala Glu His Phe Phe Gly Ala Ala Glu Ile Ile Leu Leu Thr Val 100 105 Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Arg Tyr Thr 120 125 Ile Ile Met Asn Arg Phe Val Cys Gly Leu Leu Val Gly Val Ala Trp 135 Ala Gly Gly Phe Ile His Ala Thr Ile Gln Ile Leu Phe Thr Val Trp 150 155 Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Met Cys Asp Leu 170 Thr Pro Leu Leu Lys Leu Val Cys Met Asp Thr His Asn Leu Gly Leu 180 185 Phe Val Ala Ala Asn Ser Gly Phe Ile Cys Leu Leu Asn Phe Leu Leu 200 205 Leu Met Ile Ser Tyr Ile Val Ile Leu Asp Ala Leu Lys Ser His Ser 215 220 Lys Glu Gly Arg Cys Lys Ala Leu Ser Thr Cys Val Ser His Ile Thr 230 235 Val Val Ile Leu Phe Phe Val Pro Cys Ile Phe Val Tyr Leu Arg Pro 245 250 Val Ile Thr Phe Ser Ile Asp Lys Ala Val Ala Val Phe Tyr Thr Met 265 Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Thr Glu 280 Val Lys Asn Ala Met Lys Lys Leu Cys Ile Lys Val Asp 295

<210> 1450 <211> 307 <212> PRT

35

```
<400> 1450
Met Ala Ser Val Asn Val Thr Glu Leu Ile Ile Thr Gly Leu Phe Gln
Asp Pro Asp Val Gln Lys Val Cys Phe Val Leu Phe Leu Pro Val Tyr
                                25
Leu Ala Thr Val Leu Gly Asn Gly Leu Ile Val Val Thr Ile Ser Val
Ser Lys Ser Leu Asn Ser Pro Met Tyr Ile Phe Leu Ser Ser Leu Ser
                       55
Ile Val Glu Ile Cys Tyr Ser Ser Thr Val Val Pro Lys Phe Ile Thr
                                        75
Asp Leu Leu Ala Lys Val Lys Thr Ile Ser Leu Lys Gly Cys Leu Thr
               85
                                   90
Gln Ile Phe Phe Phe His Phe Leu Gly Val Ala Glu Ile Leu Leu
                               105
Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His
                            120
Tyr Met Asn Ile Met Ser Arg Gln Val Cys His Met Leu Val Gly Gly
                       135
                                            140
Ser Trp Leu Gly Gly Leu Ile His Ser Ile Ile Gln Ile Val Ile Thr
                                        155
Ile Pro Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe Cys
               165
                                   170
Asp Leu Gln Pro Leu Phe Lys Leu Ala Cys Thr Asp Thr Phe Met Glu
           180
                               185
Gly Val Val Val Met Ala Asn Ser Gly Leu Ile Ser Ile Ile Ser Leu
                           200
                                                205
Phe Ile Leu Val Ser Ser Tyr Ala Ile Ile Leu Ile Ser Leu Arg Lys
                        215
                                            220
His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ala Ser His
                    230
                                        235
Ile Thr Val Val Ile Leu Phe Phe Gly Pro Ala Thr Phe Leu Tyr Leu
                245
                                    250
Arg Pro Ser Ser Phe Thr Glu Asp Lys Leu Val Ala Val Phe Tyr
                               265
Thr Val Ile Thr Pro Met Leu Asn Pro Ile Ile Tyr Thr Leu Arg Asn
                           280
                                               285
Ala Glu Val Lys Asn Ala Met Lys Lys Leu Trp Gly Lys Arg Asn Pro
    290
                        295
Glu Thr Glu
305
<210> 1451
<211> 304
<212> PRT
<213> Mus musculus
<400> 1451
Met Ser Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Gln Asp Pro
                                    10
Asp Leu Gln Lys Leu Leu Phe Ile Val Cys Leu Ile Ile Tyr Leu Ile
           20
                                25
Thr Leu Ala Gly Asn Met Leu Ile Ser Val Thr Ile Phe Ile Ser Pro
```

40

```
Ala Leu Ala Thr Pro Met Tyr Phe Phe Leu Ser Tyr Leu Ser Ile Ile
                       55
Asp Gly Phe Tyr Ser Ser Ile Thr Pro Lys Met Ile Tyr Asp Leu
                                       75
Ile Ser Glu Lys Ser Thr Ile Ser Phe Asn Gly Cys Met Thr Gln Leu
               85
                                   90
Phe Ala Glu His Phe Phe Ala Ala Glu Ile Ile Leu Leu Ile Ser
                               105
Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Met
                           120
Thr Ile Met Asn Arg His Val Cys Ile Phe Leu Val Val Ala Ala Gly
                       135
                                          140
Ile Val Gly Phe Val His Gly Met Ile Gln Thr Thr Phe Ile Ala Gln
                   150
                                       155
Leu Pro Phe Cys Gly Pro Asn Ile Ile Asn His Phe Ile Cys Asp Leu
               165
                                   170
Ile Pro Leu Glu Leu Ala Cys Thr Asp Thr His Thr Leu Gly Pro
                               185
Leu Ile Ala Ala Asn Ser Gly Ser Met Cys Leu Leu Ile Phe Ser Met
                           200
                                              205
Leu Val Ala Ser Tyr Val Val Ile Leu Arg Ser Leu Arg Asn His Ser
                       215
                                          220
Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ala Ser His Val Thr
                  230
                                       235
Val Val Leu Phe Phe Val Pro Cys Ser Tyr Leu Tyr Val Arg Pro
               245
                                   250
Val Ile Ser Phe His Ile Asp Lys Ile Val Ser Val Phe Tyr Thr Leu
                              265
Val Thr Pro Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Glu Glu
                           280
                                               285
Val Lys Arg Val Met Lys Lys Leu Leu Gly Ser Asn His Val Lys His
   290
                       295
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1452

Met Glu Asn Arg Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr 10 Gln Asn Pro Glu Gly Gln Lys Val Leu Phe Val Thr Phe Leu Leu Ile 25 Tyr Ile Val Thr Val Met Gly Asn Leu Ile Met Val Thr Ile Met 40 . Ala Ser Gln Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Tyr Leu 55 Ser Phe Ile Asp Thr Val Tyr Ser Thr Ser Ile Ala Pro Lys Met Ile Ile Asp Leu Leu Tyr Glu Thr Lys Thr Ile Ser Phe Arg Ala Cys Met 90 85 Thr Gln Val Phe Ile Asp His Leu Phe Ala Gly Ala Glu Val Ile Leu 105 110 100 Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 His Tyr Leu Thr Ile Met Asn Arg Arg Val Cys Val Leu Met Leu Leu

```
130
                       135
Gly Ala Trp Ile Gly Gly Phe Leu His Ser Leu Ile Gln Phe Ile Phe
                    150
                                        155
Ile Tyr Gln Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp Ser Phe Val
                                    170
                165
Cys Asp Met Tyr Pro Leu Leu Lys Leu Ala Cys Thr Asn Thr Tyr Leu
           180
                               185
Ile Gly Leu Cys Met Ile Ala Asn Gly Gly Ala Ile Cys Thr Val Thr
                           200
                                                205
Phe Leu Ile Leu Leu Val Ser Tyr Gly Val Ile Leu His Ser Leu Lys
                        215
Ala His Ser Leu Glu Gly Lys Arg Lys Ala Leu Tyr Thr Cys Ala Ser
                    230
                                        235
His Ile Thr Val Val Leu Phe Phe Val Pro Cys Ile Phe Leu Tyr
                245
                                    250
Ala Arg Pro Thr Ser Thr Phe Pro Ile Asp Lys Ser Val Thr Val Val
            260
                                265
Leu Thr Phe Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
        275
                            280
                                                285
Asn Ala Glu Met Lys Asn Ala Met Lys Arg Leu Trp Ser Lys Lys Ser
                       295
Ser Ser Ile Val Ser Gly Leu Tyr His Ser
                    310
```

<210> 1453 <211> 305 <212> PRT

<213> Mus musculus

<400> 1453

Met Asn Val Thr Glu Phe Ile Leu Met Gly Leu Thr Gln Asn Pro Gln 10 Leu Gln Arg Ile Leu Leu Met Leu Leu Ile Ile Tyr Ile Val Thr 20 25 Val Thr Gly Asn Leu Leu Ile Val Gly Thr Ile Val Cys Ser Gln Thr 40 Leu Asn Ser Pro Met Tyr Phe Phe Leu Ala Phe Leu Ser Leu Ile Asp 55 Ala Cys Tyr Ser Ser Ser Ile Ile Pro Lys Met Leu Ala Asp Leu Met 75 70 Ser Glu Arg Lys Thr Ile Ser Phe His Gly Cys Met Ile Gln Leu Phe 85 90 Val Glu His Phe Leu Gly Ala Ser Glu Ile Val Leu Leu Val Val Met 105 Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu His Tyr Val Thr 120 Arg Met Asn His His Asn Cys Cys Val Leu Val Gly Val Cys Trp Ile 135 140 Met Gly Phe Leu His Ser Phe Gly Gln Ile Leu Val Thr Leu Trp Ile 150 155 Pro Phe Cys Gly Pro Asn Val Met Asp His Phe Cys Cys Asp Ile Phe 165 170 Pro Leu Leu Gln Leu Ala Cys Ala Asp Thr Phe Leu Leu Gly Leu Leu 185 190 Ile Ala Ala Asn Gly Gly Val Ile Pro Val Ile Thr Phe Thr Met Leu 195 200

```
Leu Met Ser Tyr Ala Val Ile Leu Phe Ser Leu Arg Thr His Ser Thr
                        215
Ala Gly Arg Lys Lys Ala Leu Ser Thr Cys Ser Ser His Ile Thr Val
                    230
                                        235
Val Val Leu Phe Phe Val Pro Cys Ile Tyr Thr Tyr Met Arg Pro Val
                                    250
                245
Thr Thr Phe His Thr Asp Lys Ala Ile Ala Val Phe Tyr Thr Leu Val
                               265
Thr Pro Met Leu Asn Pro Ile Ile Tyr Thr Val Arg Asn Ala Glu Val
                            280
Lys Asn Ala Ile Arg Met Ile Leu Lys Lys Asn Ser Ile Leu Asp Asn
                        295
Lys
305
```

<210> 1454 <211> 323 <212> PRT <213> Mus musculus

<400> 1454

Met Asn Arg Phe Tyr Phe Asn Ile Ser Leu Lys Thr Met Gln Asn Gln 10 Ser Phe Val Thr Glu Phe Ile Leu Leu Gly Leu Ser Gln Asn Pro Asn 25 Val Glu Asn Ile Leu Cys Val Val Phe Leu Phe Ile Tyr Leu Ala Thr 40 Ile Gly Gly Asn Ile Met Ile Val Val Thr Ile Ile Tyr Ser Pro Ala Leu Leu Ser Ser Pro Met Tyr Phe Phe Leu Ile Phe Leu Ser Leu Leu 70 75 Asp Ala Cys Thr Ser Ser Thr Val Thr Pro Lys Met Met Val Asp Leu 85 90 Phe Tyr Glu Arg Lys Thr Ile Ser Phe Glu Cys Cys Met Thr. Gln Leu 100 105 Phe Ala Ile His Phe Phe Thr Gly Ile Glu Val Ile Ile Leu Ser Ala 120 125 Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Ser 135 140 Ser Ile Met Thr Arg Arg Leu Cys Gly Ile Leu Val Met Val Ser Trp 150 155 Thr Gly Gly Phe Leu His Ser Leu Ile Gln Ile Ile Phe Thr Leu Gln 170 Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Leu Cys Asp Leu 180 185 Phe Pro Leu Lys Leu Ala Cys Thr Asp Thr His Ile Phe Val Ile 195 200 Leu Val Phe Ser Asn Ser Gly Ser Ile Ser Ile Ile Ile Phe Ser Ile 215 220 Leu Leu Val Ser Tyr Gly Val Ile Leu Phe Ser Leu Arg Ala His Ser 230 235 Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly Ser His Ile Thr 250 245 Val Val Leu Leu Phe Phe Val Pro Cys Phe Leu Ile Tyr Ala Arg Pro 265 Pro Ser Ala Phe Ser Ser Glu Lys Asn Ala Phe Val Phe Ala Thr Ile

280 Ile Thr Pro Leu Leu Asn Pro Met Val Tyr Thr Phe Arg Asn Lys Glu 295 Met Lys Asn Ala Ile Arg Lys Met Trp Lys Lys Leu Ile Val Val Ser 310 315 His Asp Phe <210> 1455 <211> 305 <212> PRT <213> Mus musculus <400> 1455 Met Glu Gln Arg Asn Asn Val Thr Glu Phe Val Leu Leu Gly Leu Thr Gln Ser Pro Glu Gly Gln Lys Ile Leu Phe Val Val Phe Leu Val Ile 25 Tyr Val Val Thr Met Ala Gly Asn Leu Leu Ile Val Val Thr Val Val Val Ser Pro Ser Leu Asp Ala Pro Met Tyr Phe Phe Leu Gly Tyr Leu 55 Ser Phe Met Asp Ala Val Tyr Ser Thr Thr Val Thr Pro Asn Met Ile 75 Ile Asp Leu Leu Tyr Glu Lys Lys Thr Ile Ser Phe Lys Ala Cys Met 85 90 Ser Gln Leu Phe Ile Gly His Leu Phe Gly Gly Ala Glu Ile Leu Leu 105 Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 His Tyr Leu Thr Ile Met Asn Gln Arg Val Cys Val Leu Leu Leu Leu 135 Leu Ala Trp Phe Gly Gly Phe Leu His Ala Val Val Gln Leu Leu Phe 150 155 Val Tyr Asn Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Phe Ile 170 165 Cys Asp Met Tyr Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr Tyr Val 185 190 Ile Gly Leu Thr Val Val Ala Asn Asp Gly Ala Ile Cys Val Val Ile 200 205 Phe Met Leu Leu Val Ile Ser Tyr Gly Val Ile Leu His Ser Leu Lys 215 Asn Leu Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly Ser 235 230 His Ile Thr Val Val Leu Phe Phe Val Pro Cys Ile Phe Met Tyr 245 250 Val Arg Pro Pro Ser Thr Leu Pro Ile Asp Lys Ser Leu Thr Val Phe 260 265 Tyr Thr Val Val Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg 280 285 Asn Ala Glu Met Lys Asn Ala Met Arg Lys Leu Trp Ala Ser Lys Gly 295 300

Lys 305

```
<212> PRT
<213> Mus musculus
<400> 1456
Met Gly Gln Ser Tyr Asn Val Thr Glu Phe Ile Phe Val Asp Leu Thr
                                   10
Gln Asp Pro Ala Gly Lys Lys Ala Leu Phe Val Leu Phe Ser Leu Thr
                               25
Tyr Ile Val Thr Met Leu Gly Asn Leu Leu Ile Ala Val Thr Val Ile
                           40
Ala Ser Pro Ser Leu Asn Ser Pro Met Tyr Phe Phe Leu Ala Cys Leu
Ser Val Leu Asp Ala Phe Tyr Cys Asn Thr Ile Ser Pro Asn Leu Ile
                                        75
Ile Gly Leu Leu Lys Asp Lys Asn Asn Ile Ser Phe Arg Ala Cys Met
                                   90
               8.5
Leu Gln Leu Phe Val Glu His Leu Phe Gly Gly Val Glu Val Phe Leu
                               105
Leu Val Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                           120
His Tyr Leu Thr Ile Met Asn Gln Arg Val Cys Ile Leu Leu Leu Leu
                       135
                                          140
Val Ala Gly Val Gly Gly Ile Leu His Ser Leu Ile Gln Val Leu Thr
                  150
                            155
Val Tyr Lys Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Met
                                   170
Cys Asp Met Asn Pro Leu Leu Gly Leu Ala Cys Thr Asp Thr Tyr Phe
                               185
Leu Gly Ile Thr Val Ile Ala Asn Gly Gly Val Ile Cys Val Gly Ile
Phe Thr Phe Leu Leu Val Ser Tyr Gly Ile Ile Leu Asn Ser Leu Lys
                       215
                                            220
Thr His Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                   230
                                       235
His Ile Met Val Val Cys Phe Phe Ala Pro Cys Ile Phe Ile Tyr
               245
                                   250
Ala Arg Pro Val Ser Asn Phe Ser Ile Asp Lys Tyr Ile Ala Val Phe
                               265
           260
                                                   270
Tyr Thr Val Val Ser Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                           280
                                               285
Asn Ser Glu Met Lys Asn Ser Ile Lys Lys Leu Trp Cys Lys Thr Leu
                        295
Ala
305
<210> 1457
<211> 306
<212> PRT
<213> Mus musculus
<400> 1457
Met Gly Gln Asn His Asn Val Thr Glu Phe Ile Phe Val Gly Leu Ser
```

Gln Asp Pro Ala Gly Gln Lys Val Leu Phe Val Leu Phe Ser Leu Thr

<210> 1456 <211> 305

```
25
Tyr Ile Val Thr Met Phe Gly Asn Leu Leu Ile Ala Leu Thr Val Ile
Ala Ser Pro Ser Leu Asn Ser Pro Met Tyr Phe Phe Leu Ala Cys Leu
                        55
Ser Val Leu Asp Ala Leu Tyr Cys Asn Thr Ile Ser Pro Asn Leu Ile
Ile Asp Leu Leu Tyr Asn Lys Lys Asn Ile Ser Phe Arg Ala Cys Met
                                   90
               8.5
Leu Gln Leu Phe Val Glu His Leu Phe Gly Gly Val Glu Val Phe Leu
           100
                                105
                                                   110
Leu Val Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                           120
                                               125
His Tyr Leu Thr Ile Met Asn Gln Arg Val Cys Ile Leu Leu Leu
                        135
Ile Ala Gly Val Gly Gly Ile Leu His Ser Leu Ile Gln Val Leu Thr
                    150
                                        155
Val Tyr Lys Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Met
               165
                                    170
Cys Asp Met Asn Gln Leu Leu Gly Leu Ala Cys Thr Asp Thr Tyr Phe
                               185
Leu Gly Ile Thr Val Met Ala Asn Gly Gly Val Ile Cys Val Gly Ile
       195
                            200
Phe Thr Phe Leu Leu Val Ser Tyr Gly Ile Ile Leu Asn Ser Leu Lys
                       215
                                            220
Thr His Ser Arg Glu Gly Arg His Lys Ala Leu Phe Thr Cys Ser Ser
                    230
                                        235
His Ile Met Val Val Cys Phe Phe Ala Pro Cys Ser Phe Ile Tyr
                245
                                    250
Ala Arg Pro Val Ser Asn Phe Pro Val Asp Lys Tyr Ile Ala Val Phe
                                265
Tyr Thr Val Val Ser Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                           280
Asn Ser Glu Met Lys Asn Ser Ile Lys Lys Leu Trp Cys Lys Thr Leu
Thr Thr
305
<210> 1458
<211> 310
<212> PRT
```

<213> Mus musculus

<400> 1458

Met Leu Asn His Ser Ser Val Thr Glu Phe Ile Leu Leu Gly Leu Ser 10 Gln Asn Ser Lys Val Glu Lys Val Leu Phe Val Ile Phe Leu Leu Ile 25 Tyr Leu Ala Thr Ile Gly Gly Asn Met Ile Ile Val Val Thr Ile Ile 40 Tyr Ser Pro Ala Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Ile Phe 55 Leu Ser Phe Leu Asp Ala Cys Thr Ser Ser Thr Val Thr Pro Lys Met 70 75 Ile Val Asp Phe Phe Tyr Glu Lys Lys Thr Ile Ser Phe Glu Cys Cys

```
Met Thr Gln Leu Phe Ala Val His Phe Phe Thr Gly Met Glu Val Ile
           100
                               105
Val Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                           120
Leu His Tyr Ser Ser Ile Met Thr Arg Arg Leu Cys Gly Ile Leu Val
                       135
Met Leu Ser Trp Ala Gly Gly Phe Leu His Ser Ile Ile Gln Ile Ile
                  150
                                       155
Phe Thr Leu Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr
                                   170
Met Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr His
           180
                               185
Ile Phe Val Ile Leu Val Phe Ala Asn Ser Gly Ser Ile Cys Ile Ile
                           200
Ile Phe Ser Ile Leu Leu Val Ser Tyr Ser Val Ile Leu Phe Ser Leu
                       215
                                            220
Arg Ala His Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly
                   230
                                        235
Ser His Ile Thr Val Val Leu Leu Phe Phe Val Ser Cys Ile Leu Ile
                                   250
               245
Tyr Ala Arg Pro Ala Ala Phe Ser Ser Glu Lys Asn Ala Leu Val Phe
                               265
Ala Thr Ile Ile Thr Pro Leu Leu Asn Pro Met Val Tyr Thr Phe Arg
                           280
                                            285
Asn Arg Glu Met Lys Asn Ala Ile Arg Lys Leu Trp Lys Arg Trp Lys
                       295
Val Val Ser Gly Asp Ile
305
```

<210> 1459 <211> 314 <212> PRT

<213> Mus musculus

<400> 1459

Met Gly Glu Thr Asn Asn Val Thr Glu Phe Val Leu Leu Gly Leu Thr 10 Gln Asp Pro Thr Gly Gln Lys Ala Leu Phe Val Met Phe Leu Leu Val 25 Tyr Ile Val Thr Ile Val Gly Asn Leu Leu Ile Val Gly Thr Val Ile 40 Ala Ser Pro Ser Leu Asn Ser Pro Met Tyr Phe Phe Leu Ala Phe Leu 55 Ser Leu Met Asp Ala Val Tyr Ser Thr Ala Ile Leu Pro Lys Leu Leu 75 Lys Asp Leu Val Cys Asp Lys Lys Thr Ile Ser Phe Thr Ala Cys Leu 85 90 Val Gln Leu Phe Val Glu His Leu Phe Gly Gly Ala Glu Val Phe Leu 105 Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Leu Thr Val Met Asn Gln Gln Val Cys Ile Ser Leu Leu Val 135 Val Ala Trp Val Gly Gly Phe Ala His Ala Leu Val Gln Val Leu Ser 150 155 Val Tyr Lys Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Gly

```
165
                                   170
Cys Asp Met Tyr Pro Leu Leu Ala Leu Val Cys Thr Asp Thr Tyr Phe
           180
                               185
Ile Gly Leu Thr Val Val Ala Asn Asn Gly Ala Met Cys Met Val Val
       195
                           200
Phe Val Leu Leu Phe Ser Tyr Gly Ile Ile Leu Ser Ser Leu Lys
                       215
Thr His Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                   230
                                       235
His Ile Met Val Val Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
               245
                                   250
Val Arg Pro Val Ser Asn Phe Pro Ile Asp Lys Ser Ile Ser Val Phe
           260
                               265
Tyr Thr Ala Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
                                                285
Asn Ser Glu Ile Lys Asn Ser Met Gly Lys Leu Trp Ser Lys Met Ile
                       295
                                            300
Ser Ile Asp Arg Val Arg Ile Phe Ala Tyr
                   310
<210> 1460
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1460

Met Gly Gln Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Gln Asp Pro Ala Gly Gln Lys Val Leu Phe Ile Met Phe Leu Leu Ile Tyr Ile Val Thr Ile Val Gly Asn Leu Leu Ile Val Gly Thr Val Ile Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Phe Leu 55 60 Ser Leu Met Asp Ala Val Tyr Ser Thr Ala Ile Leu Pro Lys Leu Leu 70 75 Thr Asp Leu Cys Asp Lys Lys Thr Ile Ser Phe Thr Ala Cys Leu 8.5 90 Val Gln Leu Phe Val Glu His Leu Phe Gly Gly Ser Glu Val Phe Ile 105 100 110 Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Leu Thr Ile Met Asn Arg Gln Val Cys Ile Leu Leu Val 135 Val Ser Trp Ala Gly Gly Phe Ala His Ala Leu Leu Gln Val Ile Ser 150 Val Tyr Leu Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ala 165 170 Cys Asp Met Tyr Pro Leu Leu Gly Leu Ala Cys Thr Asp Thr Tyr Phe 185 Leu Gly Leu Thr Val Val Gly Asn Asn Gly Ala Met Ser Ile Val Val 195 200 205 Phe Ile Leu Leu Val Ser Tyr Gly Ile Ile Leu Asn Ser Leu Lys 215 220 Thr His Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser 230 235

His Ile Met Val Val Leu Phe Phe Val Pro Cys Ile Phe Met Tyr 250 245 Val Arg Pro Val Ser Asn Phe Pro Ile Asp Lys Tyr Ile Thr Val Phe 260 265 Tyr Thr Val Phe Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg · 280 285 Asn Met Glu Ile Lys Asn Cys Met Ala Lys Leu Trp Cys Lys Met Phe 295 Thr Lys Asp Ile Lys Arg Asp Ser His His 310

<210> 1461 <211> 311 <212> PRT <213> Mus musculus

<400> 1461

Met Met Phe Ser Pro Asn Gln Thr Glu Val Thr Glu Phe Ile Leu Glu 10 Gly Phe Ser Glu His Ala Thr Leu Arg Leu Leu Leu Thr Gly Cys Phe 2.0 25 Leu Ser Leu Tyr Thr Ile Ala Leu Met Gly Asn Ile Val Ile Ile Ala 40 Leu Val Thr Ser Ser Thr Gly Leu His Ser Pro Met Tyr Phe Phe Leu 55 Cys Asn Leu Ala Thr Met Asp Ile Val Cys Thr Ser Ser Val Ile Pro 70 75 Lys Ala Leu Ile Gly Leu Val Ser Glu Glu Asn Thr Ile Ser Phe Lys 8.5 90 Gly Cys Met Ala Gln Leu Phe Phe Leu Leu Trp Ser Leu Ser Ser Glu Leu Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys 120 Phe Pro Leu His Tyr Ser Ser Arg Met Ser Pro Gln Leu Cys Gly Ala 135 140 Leu Ala Val Gly Val Trp Ser Ile Cys Ala Val Asn Ala Ser Val His 150 155 Thr Gly Leu Met Thr Arg Leu Ser Phe Cys Gly Pro Lys Val Ile Thr 165 170 175 His Phe Phe Cys Glu Ile Pro Pro Leu Leu Leu Ser Cys Ser Pro 180 185 Thr Tyr Ile Asn Ser Val Met Thr Leu Val Ala Asp Ala Phe Tyr Gly 200 Cys Ile Asn Phe Val Leu Thr Leu Leu Ser Tyr Gly Cys Ile Ile Ala 220 215 Ser Val Leu Arg Met Arg Ser Ala Glu Gly Lys Arg Lys Ala Phe Ser 230 235 Thr Cys Ser Ser His Leu Ile Val Val Ser Val Tyr Tyr Ser Ser Val 245 250 Phe Cys Ala Tyr Val Ser Pro Ala Ser Ser Tyr Ser Pro Glu Arg Ser 260 265 Lys Val Thr Ser Val Leu Tyr Ser Ile Leu Ser Pro Thr Leu Asn Pro 275 280 285 Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Gly Arg 295 Leu Leu Pro Phe Phe Pro Lys

305 310

<210> 1462

<400> 1463

```
<211> 311
<212> PRT
<213> Mus musculus
<400> 1462
Met Met Leu Arg Leu Asn Gln Thr Glu Val Thr Glu Phe Val Leu Glu
                                   10
Gly Phe Ser Glu His Pro Asp Leu Arg Leu Phe Leu Ile Gly Cys Phe
                               25
Leu Thr Leu Tyr Ile Met Ala Leu Met Gly Asn Ile Leu Ile Ile Ala
                           40
                                               4.5
Leu Val Thr Ser Ser Thr Gly Leu His Asn Pro Met Tyr Phe Phe Leu
                        55
Cys Asn Leu Ala Thr Thr Asp Ile Leu Cys Thr Ser Ser Val Ile Pro
                   70
                                       75
Lys Ala Leu Val Gly Leu Val Ser Glu Glu Asn Thr Ile Ser Phe Lys
               85
                                   90
Glu Cys Met Ser Gln Leu Phe Phe Leu Ala Trp Ser Ala Ser Ser Glu
          100
                               105
Leu Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                           120
                                               125
       115
Cys Pro Leu His Tyr Ser Ser Arg Met Ser Pro Gln Met Cys Gly Ala
                       135
                                           140
Leu Ala Met Gly Val Trp Ser Ile Ser Ala Val Asn Ala Ser Val His
                   150
                                       155
Thr Gly Leu Met Thr Arg Leu Ser Phe Cys Gly Pro Lys Val Ile Thr
               165
                                   170
His Phe Phe Cys Glu Ile Pro Pro Leu Leu Leu Ser Cys Ser Pro
           180
                               185
                                                    190
Thr Tyr Val Asn Thr Ile Met Thr Leu Leu Gly Asp Ser Phe Phe Gly
                           200
Gly Val Asn Phe Val Leu Thr Leu Leu Ser Tyr Gly Cys Ile Ile Ala
                                           220
                       215
Ser Ile Leu Arg Met Arg Ser Ala Glu Gly Lys Arg Lys Ala Phe Ser
                  230
                                       235
Thr Cys Ser Ser His Leu Ile Val Val Ser Val Tyr Tyr Ser Ser Val
                                250
               245
Phe Cys Ala Tyr Val Ser Pro Ala Ser Ser Tyr Ser Pro Glu Arg Ser
            260
                               265
Lys Val Thr Ser Val Leu Tyr Ser Ile Val Ser Pro Thr Leu Asn Pro
                           280
Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Gly Arg
                        295
Ile Leu Ala Ser Phe Ser His
<210> 1463
<211> 312
<212> PRT
<213> Mus musculus
```

```
Met Met Leu Arg Leu Asn Gln Thr Glu Val Thr Glu Phe Val Leu
Glu Gly Phe Ser Glu His Pro Asp Leu Arg Leu Phe Leu Ile Gly Cys
                               25
Phe Leu Ser Leu Tyr Met Met Ala Leu Met Gly Asn Ile Val Ile Ile
                           40
Ala Leu Val Thr Ser Ser Thr Gly Leu His Ser Pro Met Tyr Phe Phe
                       55
Leu Cys Asn Leu Ala Thr Met Asp Ile Val Cys Thr Ser Ser Val Ile
                   70
                                       75
Pro Lys Ala Leu Val Gly Leu Val Ser Gly Glu Asn Thr Ile Ser Phe
               85
                                   90
Lys Gly Cys Met Ala Gln Leu Phe Phe Leu Val Trp Ser Ala Ser Ser
                               105
Glu Leu Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile
                           120
                                               125
Cys Phe Pro Leu His Tyr Ser Ser Arg Met Ser Pro Gln Leu Cys Gly
                       135
                                           140
Ala Leu Ala Val Gly Val Trp Ser Ile Cys Ala Leu Asn Ala Ser Val
                   150
                                       155
His Thr Gly Leu Met Thr Arg Leu Ser Phe Cys Gly Pro Lys Ile Ile
               165
                                   170
Thr His Phe Phe Cys Glu Ile Pro Pro Leu Leu Leu Ser Cys Ser
           180
                              185
Pro Thr Tyr Ile Asn Ser Val Met Thr Leu Val Ala Asp Ala Phe Tyr
       195
                           200
                                               205
Gly Gly Ile Asn Phe Val Leu Thr Leu Leu Ser Tyr Gly Tyr Ile Ile
                      215
                                          220
Gly Ser Ile Leu Arg Met Arg Ser Ala Glu Gly Lys Arg Lys Ala Phe
                   230
                                       235
Ser Thr Cys Ser Ser His Leu Ile Val Val Ser Val Tyr Tyr Ser Ser
               245
                                   250
Val Phe Cys Ala Tyr Val Ser Pro Ala Ser Ser Tyr Ser Pro Glu Arg
                               265
Ser Lys Val Ser Ser Val Leu Tyr Ser Val Leu Ser Pro Thr Leu Asn
                          280
Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Gly
                       295
                                           300
Arg Ile Leu Pro Ser Phe Ser His
                   310
```

<210> 1464 <211> 319 <212> PRT

<213> Mus musculus

<400> 1464

 Met Val Asp Leu Val Leu Ser Met Met Met Leu Asn Leu Asn Gln Thr

 1
 5
 10
 15

 Glu Val Thr Glu Phe Val Leu Glu Gly Phe Ser Glu His Pro Gly Leu 20
 25
 30

 Arg Leu Phe Leu Thr Gly Cys Phe Leu Ser Leu Tyr Met Met Ala Leu 35
 40
 45

 Met Gly Asn Ile Leu Ile Ile Ala Leu Val Thr Phe Ser Thr Gly Leu 50
 55
 60

 His Asn Pro Met Tyr Phe Phe Leu Cys Asn Leu Ala Thr Met Asp Ile

```
70
Ile Cys Thr Ser Ser Val Ile Pro Lys Ala Leu Val Gly Leu Val Ser
                                    90
Glu Glu Asn Thr Ile Ser Phe Lys Gly Cys Met Ser Gln Leu Phe Phe
                                105
Leu Thr Trp Ser Ala Ser Ser Glu Leu Leu Leu Thr Val Met Ala
                           120
Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu His Tyr Ser Ser Arg
                       135
                                            140
Met Ser Pro Gln Leu Cys Gly Ala Leu Ala Met Val Val Trp Phe Ile
                   150
                                       155
Gly Leu Val Asn Ala Cys Val His Thr Gly Leu Met Thr Arg Leu Ser
               1.65
                                    170
Phe Cys Gly Pro Lys Val Ile Thr His Phe Phe Cys Glu Ile Pro Pro
                                185
Leu Leu Leu Ser Cys Ser Pro Thr Tyr Val Asn Ser Ile Leu Thr
Leu Val Ala Asp Ala Phe Phe Val Gly Ile Asn Phe Met Leu Thr Leu
                        215
                                            220
Leu Ser Tyr Gly Cys Ile Ile Ala Ser Ile Leu Arg Met Arg Ser Ala
                   230
                                        235
Glu Gly Lys Arg Lys Ala Phe Ser Thr Cys Ser Ser His Leu Ile Val
                245
                                    250
Val Ser Val Tyr Tyr Ser Ser Met Phe Cys Ala Tyr Ile Ser Pro Ala
                                265
Ser Ser Tyr Ser Pro Glu Arg Ser Lys Val Thr Ser Val Leu Tyr Ser
       275
                           280
                                                285
Ile Leu Ser Pro Thr Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys
                       295
Asp Val Lys Leu Ala Leu Gly Arg Ile Leu Ala Ser Phe Ser His
305
                    310
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1465

Met Met Leu Leu Ser Leu Asn Gln Thr Gly Val Thr Glu Phe Val Leu 10 Glu Gly Phe Ser Glu His Pro Gly Leu Arg Leu Phe Leu Thr Gly Cys Phe Leu Thr Leu Tyr Met Met Ala Leu Met Gly Asn Ile Val Ile Ile Ala Leu Val Thr Ser Ser Thr Gly Leu His Asn Pro Met Tyr Phe Phe 55 Leu Cys Asn Leu Ala Thr Thr Asp Ile Val Cys Thr Ser Ser Val Ile 70 75 Pro Lys Ala Leu Ile Gly Leu Val Ser Glu Glu Asn Ile Ile Thr Phe 90 85 Lys Gly Cys Met Ala Gln Leu Phe Phe Leu Ala Trp Ala Thr Ser Ala 105 Glu Leu Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile 120 125 Cys Phe Pro Leu His Tyr Ser Ser Arg Met Ser Pro Gln Leu Cys Gly 140

```
Ala Leu Ala Val Gly Val Trp Ser Ile Ser Ala Val Asn Ala Ser Val
                   150
                                       155
His Thr Gly Leu Met Thr Arg Leu Ser Phe Cys Gly Pro Lys Val Ile
                                   170
               165
Thr His Phe Phe Cys Glu Ile Pro Pro Leu Leu Leu Ser Cys Ser
           180
                               185
Ser Thr Tyr Ile Asn Ser Val Met Thr Leu Val Ala Asp Val Phe Leu
                          200
                                               205
Gly Gly Ile Asn Phe Met Leu Thr Leu Leu Ser Tyr Gly Phe Ile Ile
                       215
Ala Ser Ile Leu Arg Met Arg Ser Ala Glu Gly Lys Arg Lys Ala Phe
                  230
                                       235
Ser Thr Cys Ser Ser His Leu Ile Val Val Ser Val Tyr Tyr Ser Ser
               245
                                   250
Val Phe Cys Ala Tyr Ile Ser Pro Ala Ser Ser Tyr Ser Pro Glu Arg
                               265
Ser Lys Phe Thr Ser Val Leu Tyr Ser Val Val Ser Pro Thr Leu Asn
                           280
Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Gly
                       295
Arg Met Leu Ala Ser Phe Ser His
```

<211> 319

<212> PRT

<213> Mus musculus

<400> 1466

Met Val Leu Ser Asn Ile Thr His Phe Ser Pro Met Phe Tyr Leu Ser 10 Gly Phe Pro Gly Leu Glu Ala Ile Glu His Trp Ile Phe Ile Pro Phe 25 Phe Leu Met Tyr Leu Val Ala Ile Ser Gly Asn Cys Leu Ile Leu Ile 40 Ile Ile Lys Thr Ser Pro Arg Leu His Thr Pro Met Tyr Tyr Leu Leu 55 Ser Leu Leu Ala Leu Thr Asp Leu Gly Leu Ser Val Ser Thr Leu Pro 70 75 Thr Met Val Gly Ile Phe Trp Phe Asn Tyr His Gly Ile Tyr Phe Gly 90 8.5 Ala Cys Gln Ile Gln Met Phe Cys Ile His Ser Phe Ser Phe Met Glu 105 Ser Ala Val Leu Leu Val Met Ser Phe Asp Arg Phe Val Ala Ile Cys 120 125 His Pro Leu Arg Tyr Ser Ser Ile Ile Thr Val Gln Arg Val Met Arg 135 140 Ala Gly Leu Cys Val Ile Leu Arg Gly Pro Val Ala Leu Ile Pro Ile 150 155 Val Leu Leu Lys Asp Phe Pro Tyr Cys Gly Pro Leu Val Leu Ser 165 170 His Ser Phe Cys Leu His Gln Glu Val Ile His Leu Ala Cys Val Asp 185 Thr Thr Phe Asn Asn Leu Tyr Gly Leu Ser Leu Val Val Phe Thr Val 200 205 Met Leu Asp Leu Val Leu Ile Ala Leu Ser Tyr Gly Phe Ile Leu Tyr

```
210
                        215
Thr Val Ala Gly Leu Ala Ser Gln Glu Glu Gln Ile Arg Ala Phe Gln
                    230
                                        235
Thr Cys Thr Ser His Leu Cys Ala Val Leu Val Phe Phe Val Pro Met
                245
                                    250
Met Gly Leu Ser Leu Val His Arg Phe Gly Lys His Ala Pro Pro Ala
                                265
Val His Leu Leu Met Ala Asn Ile Tyr Leu Phe Val Pro Pro Met Leu
                            280
                                                285
Asn Pro Val Ile Tyr Ser Ile Lys Thr Lys Glu Ile Arg Lys Ala Ile
                        295
                                            300
Ile Arg Phe Leu Gly Phe Arg Lys Val Asn Ser Glu Ser Trp Gly
                    310
<210> 1467
<211> 314
<212> PRT
<213> Mus musculus
<400> 1467
Met Met Glu Arg Glu Asn Tyr Thr Phe Asn Ser Asp Phe Ile Leu Leu
                                    10
Gly Leu Phe Ser Ser Ser Lys Ile Ser Leu Thr Phe Phe Ser Val Ile
            20
                                25
Phe Phe Ile Phe Ile Met Thr Ile Thr Glu Asn Ala Leu Met Ile Leu
                            40
Leu Ile His Arg Asp Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu
                        55
Ser His Leu Ser Phe Met Asp Ile Leu His Ile Ser Asn Ile Val Pro
                   70
Lys Met Ile Ala Asp Phe Leu Ser Gly Ser Arg Thr Ile Ser Phe Ala
Gly Cys Ala Phe Gln Ile Phe Leu Ser Leu Thr Leu Leu Gly Gly Glu
            100
                                105
                                                    110
Cys Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys
                            120
His Pro Leu Arg Tyr Pro Val Leu Met Arg Asp Asn Phe Ser Arg Leu
                       135
                                            140
Leu Ala Ala Gly Ser Trp Leu Val Gly Ile Leu Asn Ser Ile Val His
                   150
                                        155
```

Thr Ala Phe Val Leu His Phe Pro Phe Cys His Ser Arg Ala Ile Asp

His Phe Phe Cys Glu Val Pro Ala Met Leu Lys Leu Ser Cys Ile Asp

Thr Val Phe Gln Met His Ser Ser Gly Ala Arg Gln Lys Ser Phe Ser

Thr Cys Leu Phe His Met Val Val Ile Met Tyr Tyr Gly Pro Phe

Ile Phe Thr Tyr Met Arg Pro Arg Ser Tyr His Thr Pro Gly Gln Asp

Lys Phe Leu Ala Ile Phe Tyr Thr Ile Leu Thr Pro Thr Leu Asn Pro 280

265

215

230

185 Thr Thr His Tyr Glu Arg Gly Val Tyr Val Ser Gly Ile Ile Phe Leu 200 Leu Ile Pro Phe Ser Met Ile Ser Ile Ser Tyr Val Gln Ile Leu Leu

170

250

220

270

235

165

245

180

260

275

Ile Ile Tyr Ser Phe Arg Asn Lys Asp Val Leu Met Ala Leu Lys Asn 295 Ile Val Gln Ser Asn Ile Leu Asn Lys Glu 310 <210> 1468 <211> 313 <212> PRT <213> Mus musculus <400> 1468 Met Met Glu Tyr Glu Asn Tyr Thr Phe Asn Asp Phe Ile Leu Leu Gly Leu Phe Ser Ser Ser Lys Thr Ser Leu Thr Phe Phe Ser Val Ile Phe 25 Phe Ile Phe Ile Met Ala Ile Thr Glu Asn Ala Leu Met Ile Leu Leu 40 Ile His Arg Asp Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ser 55 60 His Leu Ser Phe Met Asp Ile Leu His Ile Ser Asn Ile Val Pro Lys 70 75 Met Ile Ala Asp Phe Leu Ser Gly Ser Arg Thr Ile Ser Phe Ala Gly 85 90 Cys Ala Phe Gln Ile Phe Leu Ser Leu Thr Leu Leu Gly Gly Glu Cys 105 100 Leu Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His 120 Pro Leu Cys Tyr Pro Val Leu Met Arg Asp Asn Phe Ser Arg Leu Leu 135 140 Ala Ala Gly Ser Trp Leu Val Gly Ile Leu Asn Ser Ile Val His Thr 150

Ala Phe Val Leu His Phe Pro Phe Cys His Ser Arg Ala Ile Asp His 170 165 Phe Phe Cys Glu Val Pro Ala Met Leu Lys Leu Ser Cys Ile Asp Thr 185 Thr His Tyr Glu Gln Gly Val Tyr Val Ser Gly Ile Ile Phe Leu Met 195 200 205 Val Pro Phe Ser Met Ile Ser Ile Ser Tyr Val Gln Ile Leu Leu Thr 215 220 Val Phe Gln Met His Ser Ser Gly Ala Arg Gln Lys Ser Phe Ser Thr 230 235 Cys Leu Phe His Met Val Val Ile Met Tyr Tyr Gly Pro Val Ile 245 250 Phe Thr Tyr Met Arg Pro Arg Ser Tyr His Thr Pro Gly Gln Asp Lys 265 Phe Leu Ala Ile Phe Tyr Thr Ile Leu Thr Pro Lys Leu Asn Pro Ile 280 285 Ile Tyr Ser Phe Arg Asn Lys Asp Val Leu Arg Ala Leu Lys Asn Ile 295 Val Gln Ser Asn Ile Leu Asn Lys Lys 310

<210> 1469

<211> 309 <212> PRT

```
<400> 1469
Met Glu Ile Asn Asn Tyr Thr Thr Val Val Glu Phe Val Leu Gln Gly
                                    10
Leu Ser Glu Asp Pro Gly Leu Gln Ala Leu Phe Leu Ala Phe Phe Leu
                               25
Leu Leu Tyr Ile Leu Ala Leu Ala Gly Asn Thr Leu Ile Ile Ile Ala
                           40
Ile Ser Leu Asn Ser Ser Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
Asn Leu Ala Leu Leu Asp Ile Val Cys Thr Ser Thr Val Leu Pro Lys
                   70
                                       75
Leu Leu Glu Gly Leu Val Gly Lys Ser Ser His Ile Ser Tyr Lys Gly
                                    90
Cys Met Thr Gln Leu Phe Phe Leu Thr Trp Phe Leu Gly Ala Glu Leu
Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
                            120
Pro Leu His Tyr Ser Met Leu Met Ser Trp Pro Ile Cys Val Leu Leu
                       135
Ala Gly Ser Val Trp Val Ile Ser Ala Ala Ser Thr Ser Val His Thr
                   150
                                        155
Gly Leu Met Ala Arg Leu Asn Phe Cys Gly Pro Asn Gln Ile Arg His
               165
                                   170
Phe Leu Cys Glu Val Pro Thr Leu Leu Leu Ser Cys Ser Pro Thr
           180
                               185
                                                   190
Thr Leu Asn Asn Ile Met Ile Val Ile Ala Asp Val Tyr Phe Gly Val
                            200
Val Asn Phe Leu Leu Thr Met Ile Ser Tyr Ser Phe Ile Ile Thr Ser
                        215
                                            220
Ile Leu Arg Ile Arg Ser Thr Glu Gly Lys Lys Arg Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ala His Leu Val Val Val Leu Tyr Tyr Ser Thr Val Ile
                                   250
               245
Tyr Thr Tyr Leu Gln Pro Gly Ser Gly Ser Ser Leu Glu Asn Gly Lys
                               265
Val Val Ala Leu Leu Tyr Thr Ala Val Ser Pro Thr Leu Asn Pro Ala
                           280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Lys Lys Leu
                       295
Phe Pro Cys Phe Gln
305
<210> 1470
<211> 311
<212> PRT
<213> Mus musculus
<400> 1470
Met Met Ser Arg Leu Asn Gln Thr Val Val Thr Glu Phe Ile Leu Gln
                                    10
Gly Phe Ser Glu His Pro Ser Leu Arg Leu Phe Leu Thr Gly Cys Phe
                               25
Leu Ser Leu Tyr Val Met Ala Leu Met Gly Asn Ile Leu Ile Ile Ala
```

40

```
Leu Val Thr Phe Ser Thr Gly Leu His Ser Pro Met Tyr Phe Phe Leu
                       55
Cys Asn Leu Ala Thr Met Asp Ile Ile Cys Thr Ser Ser Val Leu Pro
                                       75
Lys Ala Leu Val Gly Leu Leu Ser Glu Glu Asn Thr Ile Ser Phe Lys
               85
                                   90
Gly Cys Met Ala Gln Leu Phe Phe Leu Val Trp Ser Leu Ser Ser Glu
                               105
Leu Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                           120
                                               125
Phe Pro Leu His Tyr Ser Ser Arg Met Ser Pro Gln Leu Cys Gly Ala
                       135
                                           140
Leu Ala Met Gly Val Trp Ser Ile Cys Ala Leu Asn Ala Ser Ile Asn
                   150
                                       155
Thr Gly Leu Met Thr Arg Leu Ser Phe Cys Gly Pro Lys Val Ile Thr
               165
                                   170
His Phe Phe Cys Glu Ile Pro Pro Leu Leu Leu Ser Cys Ser Pro
           180
                               185
                                                   190
Thr Tyr Val Asn Ser Ile Met Thr Leu Ile Ala Asp Val Phe Tyr Gly
                           200
Gly Ile Asn Phe Val Leu Thr Leu Leu Ser Tyr Gly Cys Ile Ile Ala
                       215
                                           220
Ser Ile Leu Arg Met Arg Ser Ala Glu Gly Lys Arg Lys Ala Phe Ser
              230
                                       235
Thr Cys Ser Ser His Leu Ile Val Val Ser Val Tyr Tyr Ser Ser Val
               245
                                  250
Phe Cys Ala Tyr Val Ser Pro Ala Ser Ser Tyr Ser Pro Glu Arg Ser
           260
                               265
Lys Val Thr Ser Val Leu Tyr Ser Phe Leu Ser Pro Thr Leu Asn Pro
                           280
Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Leu Ala Ile Gly Arg
                       295
Leu Leu Pro Ser Phe Ser His
305
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1471

Met Thr Met Leu Ser Pro Asn Gln Thr Val Val Thr Glu Phe Val Leu 10 Glu Gly Phe Ser Glu His Pro Ser Leu Arg Leu Phe Leu Met Gly Cys Phe Leu Ser Leu Tyr Thr Val Ala Leu Met Gly Asn Ile Leu Ile Ile 4.0 Ala Leu Val Thr Ser Ser Thr Gly Leu His Ser Pro Met Tyr Phe Phe 55 Leu Cys Asn Leu Ala Thr Met Asp Ile Val Cys Thr Ser Ser Val Ile 70 75 Pro Lys Ala Leu Ile Gly Leu Val Phe Glu Glu Asn Thr Ile Ser Phe 85 90 Lys Gly Cys Met Ala Gln Leu Phe Phe Leu Val Trp Ser Ala Ser Ser 105 Glu Leu Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile

```
115
                           120
Cys Tyr Pro Leu His Tyr Ser Ser Arg Met Ser Pro Gln Leu Cys Gly
   130
                       135
                                            140
Val Leu Ala Met Ser Val Trp Ser Val Cys Ala Leu Asn Ala Ser Ile
                   150
                                       155
Asn Thr Gly Leu Met Thr Arg Leu Ser Phe Cys Gly Pro Lys Val Ile
               165
                                   170
Thr His Phe Phe Cys Glu Ile Pro Pro Leu Leu Leu Ser Cys Ser
           180
                               185
Pro Thr Tyr Val Asn Ser Val Met Thr Leu Val Ala Asp Ala Phe Tyr
                           200
Gly Gly Ile Asn Phe Met Leu Thr Leu Leu Ser Tyr Gly Tyr Ile Ile
                       215
                                           220
Ala Ser Ile Leu Arg Met Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe
                   230
                                        235
Ser Thr Cys Ser Ser His Leu Ile Val Val Ser Val Tyr Tyr Ser Ser
                245
                                    250
Val Phe Cys Ala Tyr Val Ser Pro Ala Ser Ser Tyr Ser Pro Glu Arg
           260
                               265
Ser Lys Val Ser Ser Val Leu Tyr Ser Val Leu Ser Pro Thr Leu Asn
                           280
                                         285
Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Gly
                       295
Arg Arg Leu Pro Ser Phe Tyr His
                    310
```

<211> 304

<212> PRT

<213> Mus musculus

<400> 1472

Met Asn Gly Thr Leu Val Thr Glu Phe Leu Ile Leu Gly Phe Ser Asp 10 Met Pro His Leu Arg Ile Leu Leu Phe Leu Ser Phe Leu Cys Leu Tyr 25 Met Ala Ala Val Ser Gly Asn Leu Leu Ile Met Val Thr Ile Ser Ala 40 Ser Pro Thr Leu His Thr Pro Met Tyr Phe Phe Leu Val Asn Leu Ala 5.5 Val Val Asp Ile Leu Cys Thr Ser Thr Ile Leu Pro Lys Leu Leu Asp 70 75 Thr Met Val Gly Gly Arg Thr Ile Ser Tyr Gly Gly Cys Met Ala Gln 90 85 Leu Phe Phe Thr Trp Ser Leu Gly Val Glu Leu Leu Phe Ser 105 Ala Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Cys Pro Leu His Tyr 115 120 Ser Thr Trp Met Gly Pro Arg Val Cys Ala Phe Leu Ala Gly Ile Val 135 140 Trp Ala Ile Ser Leu Thr Asn Thr Ser Ile Asn Ser Ser Leu Val Leu 150 155 Arg Leu Pro Phe Cys Ser Ser Asn Val Val Glu His Phe Phe Cys Glu 170 165 Ile Pro Pro Leu Leu Lys Leu Ser Cys Ala Pro Thr Gln Leu Asn Glu 185

Ala Met Ala Phe Ala Asp Val Phe Leu Ala Val Gly Asn Phe Ser 200 Val Ile Ile Leu Ser Tyr Gly Phe Ile Val Ala Ser Ile Leu Lys Ile 215 Arg Ser Ala Glu Gly Lys Gln Arg Ala Phe Ser Thr Cys Ser Ala His 230 235 Leu Ile Val Val Thr Met Tyr Tyr Ser Thr Val Ile Tyr Thr Tyr Ile 245 250 Arg Pro Ser Ser Ser Tyr Ser Leu Asn Lys Asp Lys Val Val Ser Ile 265 Ile Tyr Thr Ser Val Ala Pro Thr Leu Asn Pro Leu Ile Tyr Thr Leu 280 Arg Asn Lys Asp Val Lys Val Ala Leu Arg Arg Leu Phe Ser Cys Cys 295

<210> 1473

<211> 312

<212> PRT

<213> Mus musculus

<400> 1473

Met Ser Asn Cys Ser Asn Asn Ala Leu Val Thr Glu Phe Ile Leu Leu 10 Gly Phe Pro Glu Leu Cys His Leu Gln Gly Leu Leu Phe Gly Phe Phe 25 Leu Ile Ile Tyr Val Val Thr Val Leu Glu Asn Leu Val Ile Val Gly 40 Thr Ile Ser Ala Ser Arg Gln Leu His Thr Pro Met Tyr Phe Phe Leu 55 Ala Asn Leu Ser Val Leu Glu Thr Leu Tyr Thr Thr Val Thr Val Pro 75 Lys Leu Leu Ala Asp Leu Leu Ala Gly Ala Lys Thr Ile Ser Phe Ser 85 90 Gly Cys Leu Thr Gln Leu Phe Leu Phe Leu Ser Leu Gly Ser Ser Glu 105 Cys Phe Leu Leu Ser Thr Met Ala Cys Asp Arg Tyr Leu Ala Ile Cys 120 125 Arg Pro Leu His Tyr Pro Ala Ile Met Asp Ser Lys Leu Cys Leu His 135 140 Leu Ala Leu Ser Ala Trp Leu Gly Gly Phe Leu Ala Ser Phe Val Ser 150 155 Thr Ala Leu Ile Ser Arg Leu Arg Phe Cys Gly Pro Asn Ala Leu Asn 165 170 His Phe Phe Cys Asp Ile Ser Pro Leu Gln Leu Ser Cys Thr Asp 180 185 Thr Thr Ala Ile Glu Met Leu Asp Phe Val Ala Ala Leu Ala Val Leu 200 205 Ala Thr Ser Leu Ile Val Thr Ser Val Ser Tyr Val His Ile Ile Ala 215 220 Thr Val Leu Arg Ile Pro Gly Gly Ala Gly Arg Arg Lys Ala Phe Ser 230 235 Thr Cys Ala Ser His Leu Val Val Leu Ile Phe Tyr Thr Thr Thr 245 250 Thr Phe Met Tyr Ala Arg Pro His Ala Ile Ser Ser Phe Asp Leu Asn 265 Lys Leu Val Ser Val Ile Tyr Ser Val Val Thr Pro Leu Leu Asn Pro

280 275 Ile Ile Tyr Cys Leu Arg Asn Arg Asp Ile Arg Glu Ala Phe Thr Lys 295 300 Phe Leu Gln Pro Leu Arg Phe Pro 310 <210> 1474 <211> 312 <212> PRT <213> Mus musculus <400> 1474 Met Arg Arg Asp Asn Glu Ser Thr Val Ser Glu Phe Ile Leu Leu Gly Leu Pro Ile Arg Ala Glu Asp Gln Gly Leu Tyr Ser Ala Leu Phe Leu Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu 40 Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Ala Ser Pro Lys 70 75 Met Val Ile Asn Met Leu Thr His Ser Gln Ser Ile Ser Tyr Ala Gly 85 90 Cys Val Ser Gln Val Tyr Phe Phe Ser Phe Phe Ala Asp Leu Glu Ser 105 100 Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 Pro Leu His Tyr Ser Gln Ile Met Ser Glu Asn Leu Cys Val Leu Leu 135 140 Ile Val Val Ser Trp Thr Leu Ser Thr Ala Asn Ser Leu Val His Thr 150 155 Leu Leu Val Gln Leu Ser Tyr Phe Arg Asn Asn Thr Ile Pro His 165 170 Tyr Phe Cys Asp Leu Ser Thr Leu Leu Lys Leu Ser Ser Ser Asp Thr 185 190 180 Thr Ile Asn Glu Leu Val Ile Leu Val Leu Gly Asn Met Val Ile Thr 200 Leu Pro Phe Ile Cys Ile Leu Val Ser Tyr Gly His Ile Gly Val Thr 215 220 Ile Met Lys Ile Pro Ser Ile Lys Gly Ile Cys Lys Ala Leu Ser Thr 230 235 Cys Gly Ser His Leu Cys Val Val Ser Leu Tyr Tyr Gly Ala Ile Ile 250 245 Gly Leu Tyr Phe Val Pro Ser Ser Asn Asn Thr Ser Asp Lys Asp Ala 265 270 Ile Val Ala Met Met Tyr Thr Met Val Ile Pro Met Leu Asn Pro Phe 280 285 Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Arg Asn Ile 300 295 Leu Ser Gly Arg Leu Trp Ser Gln 310

<210> 1475 <211> 313

<400> 1475 Met Arg Arg Asp Asn Glu Ser Thr Val Ser Glu Phe Ile Leu Leu Gly 5 10 Leu Pro Ile Gln Pro Glu Asp Gln Gly Leu Tyr Ser Ala Leu Phe Leu 25 Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu 40 Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 60 His Leu Ala Phe Thr Asp Val Ser Phe Ser Ser Val Thr Ala Pro Lys Met Leu Met Asn Met Leu Thr His Ser Gln Ser Ile Ser Tyr Ala Gly 90 Cys Val Ser Gln Val Tyr Phe Phe Ser Thr Phe Thr Asp Leu Asp Ser 105 100 Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 Pro Leu His Tyr Thr Thr Ile Met Ser Gln Asn Leu Cys Val Leu Leu 135 140 Val Val Met Ser Trp Val Leu Ser Ser Ala Asn Ala Leu Val His Thr 150 155 Leu Leu Leu Ala Arg Leu Ser His Phe Arg Asn Asn Thr Ile Pro His 165 170 175 Tyr Phe Cys Glu Pro Ser Ala Leu Leu Ser Leu Ser Ser Ser Asp Thr 185 Thr Ile Asn Glu Met Val Ile Leu Pro Leu Gly Thr Leu Val Ile Thr 200 205 Leu Pro Phe Ile Cys Ile Leu Val Ser Tyr Gly Arg Ile Gly Val Thr 215 Ile Leu Arg Thr Pro Ser Ile Lys Gly Ile Cys Lys Ala Leu Ser Thr 230 235 Cys Gly Ser His Leu Ser Val Val Cys Leu Tyr Tyr Gly Ala Ile Ile 245 250 Gly Leu Tyr Leu Val Pro Ser Ser Asn Asn Thr Asn Asp Lys Asp Val 260 265 Ile Val Ala Val Ile Tyr Ser Leu Val Thr Pro Met Val Asn Pro Phe 285 280 Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Ala Leu Arg Asn Ile 295 Leu Asn Arg Arg Leu Cys Pro Gln Trp 310

<210> 1476 <211> 309 <212> PRT

<213> Mus musculus

<400> 1476

Met Arg Met Asp Asn Asp Ser Ala Leu Ser Glu Phe Ile Leu Leu Gly 1 5 10 15 Leu Pro Ile Arg Ala Glu Asp Gln Ala Leu Tyr Ser Val Leu Ile Leu 20 25 30 Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu

```
40
Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr Ala Pro Lys
                   70
                                        75
Met Leu Val Asn Met Leu Thr His Ser Lys Ser Ile Pro Tyr Thr Gly
                                   90
Cys Val Ser Gln Val Tyr Phe Phe Thr Val Phe Ala Ser Ile Asp Ser
                               105
Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                           120
                                                125
Pro Leu His Tyr Asn Ile Ile Met Asn Leu Arg Leu Cys Val Leu Leu
                       135
Val Val Ile Ser Trp Ala Leu Ser Leu Thr Asn Ala Leu Ala His Thr
                    150
                                        155
Leu Leu Ala Arg Leu Ser His Phe Arg Asn Asn Thr Ile Pro His
                                    170
                165
Tyr Phe Cys Asp Leu Ser Thr Leu Leu Lys Leu Ser Ser Ser Asp Thr
           180
                               185
Thr Ile Asn Glu Leu Val Ile Phe Val Leu Gly Asn Val Val Ile Thr
                           200
Leu Pro Phe Ile Cys Ile Leu Val Ser Tyr Gly Tyr Ile Gly Val Thr
                        215
Ile Leu Lys Thr Pro Ser Ile Lys Gly Ile His Lys Ala Leu Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Cys Val Val Ser Leu Tyr Tyr Gly Ala Ile Ile
               245
                                    250
Gly Leu Tyr Phe Val Pro Ser Ser Asn Asn Thr Asn Asp Lys Asp Val
                                265
Ile Val Ala Val Met Tyr Thr Val Val Ile Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Arg Thr Leu Arg Asn Ile
                        295
Leu Ser Arg Thr Lys
305
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1477

 Met
 Lys
 Arg
 Asp
 Asn
 Glu
 Ser
 Thr
 Val
 Ser
 Glu
 Phe
 Ile
 Leu
 Leu
 Gly
 Leu
 Tyr
 Ser
 Ala
 Leu
 Phe
 Leu
 Leu
 Ala
 Leu
 Phe
 Leu
 Leu
 Ala
 Leu
 Leu</th

```
Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
        115
                           120
Pro Leu His Tyr Thr Thr Ile Met Ser Gln Ser Leu Cys Leu Phe Leu
                       135
                                            140
Val Val Ser Trp Ala Leu Ser Ser Gly Asn Ala Leu Val His Thr
                  150
                                      155
Leu Leu Leu Ala Lys Leu Ser His Phe Arg Asn Asn Thr Val Pro His
                                   170
               165
Tyr Phe Cys Asp Leu Ser Ala Met Leu Lys Leu Ser Ser Ser Asp Thr
                               185
Thr Ile Asn Glu Leu Leu Ile Leu Thr Leu Gly Thr Met Val Thr Ile
                           200
                                               205
Pro Pro Phe Ile Cys Ile Leu Val Ser Tyr Val Arg Ile Gly Val Thr
                       215
                                            220
Ile Leu Arg Thr Pro Ser Ile Lys Gly Ile Cys Lys Ala Leu Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Cys Val Val Ser Leu Tyr Tyr Gly Ala Ile Ile
                                   250
               245
Ala Leu Tyr Phe Val Pro Ser Ser Asn Asn Thr Asn Asp Lys Asp Val
                               265
Ile Val Ala Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Arg Asn Val
                       295
Leu Ser Arg Arg Leu Cys Ser Gln
                    310
```

<211> 306

<212> PRT

<213> Mus musculus

<400> 1478

Met Asp Asn Glu Ser Thr Val Ser Glu Phe Ile Leu Leu Gly Leu Pro 10 Ile Arg Ala Glu Asp Gln Ala Val Tyr Ser Ala Leu Phe Leu Val Leu 25 Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu Ile Arg 40 Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser His Leu 55 Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr Ala Pro Lys Met Leu 75 70 Val Asn Met Leu Thr His Ser Gln Ser Ile Ser Tyr Ala Gly Cys Ile 90 Ser Gln Glu Tyr Phe Phe Thr Val Phe Ala Gly Ile Asp Ser Phe Leu 105 100 Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu 120 His Tyr Ile Thr Ile Met Asn Gln Asn Leu Cys Val Leu Leu Val Val 135 140 Val Ser Trp Ala Leu Ser Ser Ala Asn Cys Leu Val His Thr Leu Leu 150 155 145 Leu Ala Cys Leu Ser His Phe Arg Asn Asn Thr Ile Pro His Tyr Phe 170 Cys Asp Leu Ser Thr Leu Leu Lys Leu Ser Ser Ser Asp Thr Thr Ile

```
185
Asn Gln Leu Val Ile Leu Val Leu Gly Asn Val Val Ile Ser Leu Pro
                            200
Phe Ile Cys Ile Leu Val Ser Tyr Gly Arg Ile Gly Val Thr Ile Met
                        215
                                            220
Lys Ala Pro Ser Ile Lys Gly Ile Cys Lys Ala Leu Ser Thr Cys Gly
                   230
                                        235
Ser His Leu Cys Val Val Ser Leu Tyr Phe Gly Ser Ile Ile Gly Leu
               245
                                    250
Tyr Cys Val Pro Ser Ser Asn Asn Ile Asn Glu Asn Asn Ala Ile Val
            260
                                265
Ser Val Met Tyr Thr Met Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                            280
                                                285
Ser Leu Arg Asn Arg Asp Ile Lys Arg Ala Leu Lys Asn Ile Leu Ser
                        295
Arg Lys
305
<210> 1479
<211> 312
<212> PRT
<213> Mus musculus
<400> 1479
Met Met Lys Ser Asn Gln Ser Thr Val Ser Glu Phe Ile Leu Leu Gly
                                    10
Leu Pro Ile Gln Pro Glu Asp Gln Ala Val Tyr Phe Ala Leu Phe Leu
Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu
Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr Ala Pro Lys
                    70
                                        75
Met Leu Met Asn Met Leu Thr His Ser Gln Ser Ile Ser His Ala Gly
                                    90
               8.5
Cys Val Ser Gln Ile Tyr Phe Phe Leu Leu Phe Gly Cys Ile Asp Asn
                                105
Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
       115
                                                125
Pro Leu His Tyr Thr Thr Ile Met Ser Gln Ser Leu Cys Val Leu Leu
                        135
Val Met Val Ser Trp Ala Phe Ser Ser Ser Asn Gly Leu Val His Thr
                    150
                                        155
Leu Leu Phe Ala Arg Leu Ser Leu Phe Arg Asp Asn Thr Val His His
                                    170
                165
Phe Phe Cys Asp Leu Ser Ala Leu Leu Lys Leu Ser Ser Ser Asp Thr
                                185
Thr Ile Asn Glu Leu Val Ile Leu Thr Leu Ala Val Val Ile Thr
                            200
                                                205
Val Pro Phe Ile Cys Ile Leu Val Ser Tyr Gly His Ile Gly Ala Thr
                        215
                                            220
Ile Leu Arg Thr Pro Ser Ile Lys Gly Ile Cys Lys Ala Leu Ser Thr
                   230
                                        235
Cys Gly Ser His Leu Cys Val Val Ser Leu Tyr Tyr Gly Ala Ile Ile
```

250

245

```
Gly Leu Tyr Phe Phe Pro Ser Ser Asn Asn Thr Asn Asp Lys Asp Val
                                265
           260
Ile Val Ala Val Leu Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Asn Gly Ala Leu Arg Lys Thr
                       295
Leu Ser Arg Arg Leu Cys Ser His
                    310
<210> 1480
<211> 311
<212> PRT
<213> Mus musculus
<400> 1480
Met Arg Arg Asp Asn Glu Ser Thr Val Ser Glu Phe Ile Leu Leu Gly
                                    10
Leu Pro Ile Arg Ala Glu Glu Gln Gly Met Tyr Phe Ala Leu Phe Leu
                                25
Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu
                            40
Ile Arg Leu Asp Ser His Leu His Ile Pro Met Tyr Phe Phe Leu Ser
                       55
                                           60
His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr Ala Pro Lys
                   70
                                        75
Met Leu Val Asn Met Leu Thr His Ser Gln Ser Ile Ser Tyr Thr Gly
```

85 90 Cys Val Ser Gln Val Tyr Phe Phe Ala Ile Phe Ala Asp Leu Asp Ser 105 Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 Pro Leu His Tyr Ser Gln Thr Met Ser Gln Thr Leu Cys Val Leu Leu 135 Val Leu Val Ser Trp Ala Leu Ser Ile Ala Asn Ala Leu Val Arg Thr 155 Leu Leu Leu Ala His Leu Ser His Phe Arg Asp Asn Thr Ile Pro His 170 165 Tyr Phe Cys Asp Leu Ser Asp Trp Leu Lys Leu Ser Ser Ser Asp Thr 185 190 Thr Ile Asn Glu Leu Val Ile Leu Val Leu Gly Asn Val Val Ile Thr 195 200 205 Leu Pro Phe Ile Cys Ile Leu Val Ser Tyr Gly His Ile Gly Val Thr 215 220 Ile Leu Lys Thr Pro Ser Ile Lys Gly Ile Cys Lys Ala Leu Ser Thr 230 Cys Gly Ser His Leu Cys Val Val Ser Leu Tyr Tyr Gly Ala Ile Ile 245 250 Gly Leu Tyr Phe Val Pro Ser Ser Asn Asn Thr Asn Asp Lys Asp Ala 265 Ile Val Ala Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe 280 285 Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Arg Asn Ile 295 Leu Gly Arg Arg Leu Cys Ser 305 310

```
<212> PRT
<213> Mus musculus
<400> 1481
Met Lys Ser Thr Arg Asn Gln Ser Ser Ala Ser Glu Phe Ile Leu Leu
                                    1.0
Gly Leu Pro Ile Gln Pro Glu Glu Gln Gly Met Tyr Tyr Ala Leu Phe
           20
                                25
Leu Ala Thr Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu
                            40
Leu Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu
                        55
Ser His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr Ala Pro
                                        75
Lys Met Leu Met Asn Met Leu Ile His Ser Gln Ser Ile Ser Tyr Ala
                                    90
                85
Gly Cys Ile Ser Gln Val Tyr Phe Phe Leu Phe Phe Ala Asp Leu Asp
                               105
Ser Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
                            120
                                                125
His Pro Leu His Tyr Thr Arg Ile Met Ser Gln Ser Ile Cys Ile Leu
                       135
                                            140
Leu Val Ile Glu Ser Trp Phe Leu Ser Phe Ala Gly Ala Leu Val His
                   150
                                       155
Thr Ile Leu Leu Ala Arg Leu Ser Phe Phe Arg Gly Asn Thr Val His
                165
                                    170
His Phe Phe Cys Asp Leu Ser Ala Leu Ile Lys Leu Ser Ser Ser Asp
            180
                                185
Thr Ser Ile Asn Glu Leu Val Ile Leu Val Val Gly Ser Leu Val Ile
                            200
Thr Val Pro Phe Val Cys Ile Leu Val Ser Tyr Gly Arg Ile Gly Ala
                       215
                                            220
Thr Ile Leu Lys Thr Pro Ser Ile Lys Gly Ile Cys Lys Ala Leu Ser
                    230
                                        235
Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Tyr Tyr Gly Ala Ile
                245
                                    250
Ile Gly Leu Tyr Phe Val Pro Ser Ser Asn Asp Thr Asn Asp Lys Asp
                                265
           260
Val Ile Val Ala Val Met Tyr Thr Met Val Thr Pro Met Leu Asn Pro
                           280
Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Arg Asn
                        295
Met Leu Ala Arg Ala Thr Ser Ser Met
<210> 1482
<211> 312
<212> PRT
<213> Mus musculus
<400> 1482
Met Thr Glu Gly Asn Glu Ser Ile Val Ser Glu Phe Ile Leu Leu Gly
```

<210> 1481 <211> 313

```
Leu Pro Ile Gln Pro Glu Asp Gln Asp Leu Tyr Ser Ala Leu Phe Leu
Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu
Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                       55
                                            60
His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr Ala Pro Lys
                                        75
Met Leu Met Asn Met Leu Thr His Ser Gln Ser Ile Ser Tyr Ala Gly
                                    90
Cys Val Phe Gln Val Tyr Phe Phe Leu Phe Phe Ala Asp Leu Asp Asn
           100
                                105
Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                           120
Pro Leu His Tyr Thr Thr Met Met Ser Gln Asn Leu Cys Val Leu Leu
                       135
                                            140
Val Val Ser Trp Thr Leu Ser Thr Ala Asn Ala Leu Val His Thr
                    150
                                        155
Leu Leu Ala Arg Leu Thr His Phe Arg Asp Asn Thr Ile Ser His
               165
                                    170
Tyr Phe Cys Asp Leu Ser Thr Leu Leu Lys Leu Ser Ser Ser Asp Thr
                                185
Thr Thr Asn Lys Leu Val Ile Leu Leu Cly Asn Val Ile Ile Thr
       195
                            200
                                                205
Leu Pro Phe Ile Cys Ile Leu Val Ser Tyr Gly Leu Ile Ala Val Thr
                       215
                                           220
Ile Leu Lys Ile Pro Ser Met Lys Gly Ile Cys Lys Ala Leu Ser Thr
                   230
                                       235
Cys Gly Ser His Leu Cys Val Val Ser Leu Tyr Tyr Gly Ala Ile Ile
                                    250
                245
Gly Leu Tyr Phe Val Pro Ser Ser Asn Asn Thr Asn Val Gln Asp Ala
                                265
Ile Val Ala Val Met Tyr Asn Val Val Thr Pro Met Leu Asn Pro Phe
                           280
                                                285
Ile Tyr Ser Leu Arg Asn Gln Asp Met Lys Gly Ala Leu Arg Asn Ile
                       295
Leu Ser Arg Arg Leu Cys Leu Gln
                    310
```

```
<210> 1483
<211> 310
```

<212> PRT

<213> Mus musculus

<400> 1483

 Met Glu Asn Glu Ser Ser Val Ser Glu Phe Phe Leu Gln Gly Ile Ser

 1
 5
 10
 15

 Gly Phe Ser Glu Gln Gln Gln Leu 25
 10
 15

 Tyr Leu Val Thr Leu Thr Gly Asn Val Leu Ile Ile Leu Ala Ile Gly 35
 40
 45

 Ser Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Ala Asn Leu 50
 55
 60

 Ser Phe Ala Asp Met Gly Leu Ile Ser Ser Thr Val Thr Lys Met Leu 65
 70
 75
 80

 Phe Asn Val Gln Thr Arg Cys His Thr Ile Ser Tyr Thr Gly Cys Leu

```
85
Thr Gln Met Tyr Phe Phe Leu Met Phe Gly Asp Leu Asp Ser Phe Leu
            100
                                105
Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu
                            120
                                                125
His Tyr Ser Thr Ile Met Ser Ala Arg Val Cys Ala Leu Met Leu Ala
                       135
Leu Cys Trp Val Leu Thr Asn Ile Val Ala Leu Thr His Thr Leu Leu
                   150
                                       155
Met Ala Arg Leu Ser Phe Cys Val Val Gly Glu Ile Ala His Phe Phe
                165
                                    170
Cys Asp Ile Thr Pro Val Leu Lys Leu Ser Cys Ser Asp Thr His Val
           180
                                185
                                                    190
Asn Glu Leu Met Val Phe Ala Leu Gly Gly Thr Val Leu Met Val Pro
                            200
Phe Val Cys Ile Val Ile Ser Tyr Ile His Ile Val Phe Ala Ile Leu
Lys Val Arg Thr Pro Gly Gly Gly Thr Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Leu Cys Val Val Cys Val Phe Tyr Gly Thr Leu Phe Ser Ala
                                    250
Tyr Leu Cys Pro Pro Ser Val Val Ser Thr Glu Lys Asp Val Ala Ala
            260
                                265
Ala Ala Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                            280
Ser Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Lys Arg Leu Leu Cys
                       295
His Arg Lys Phe Leu Ser
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1484

10 Gly Phe Pro Glu Gln Gln Leu Leu Tyr Gly Leu Phe Leu Cys Met 20 25 Tyr Leu Val Thr Leu Thr Gly Asn Val Leu Ile Ile Leu Ala Ile Ser Cys Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Ala Asn Leu 55 Ser Phe Ala Asp Met Gly Leu Ile Ser Ser Ala Val Thr Lys Met Leu 75 Phe Asn Val Gln Thr Gln Arg His Thr Ile Ser Tyr Thr Gly Cys Leu 8.5 90 Thr Gln Met Tyr Leu Phe Met Met Phe Gly Asp Leu Asp Ser Phe Phe 105 100 Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu 120 His Tyr Ser Thr Ile Met Ser Ala Arg Val Cys Ala Leu Met Leu Ala 135 140 Leu Cys Trp Val Leu Thr Asn Ile Val Ala Leu Thr His Thr Leu Leu 150

Met Glu Asn Gln Ser Ser Val Ser Glu Phe Phe Leu Arg Gly Ile Ser

```
Met Thr Arg Leu Ser Phe Cys Val Val Gly Glu Ile Ala His Phe Phe
                                    170
                165
Cys Asp Ile Thr Ser Val Met Lys Leu Ser Cys Ser Asp Thr His Val
                                185
Asn Glu Leu Val Leu Ser Gly Phe Gly Gly Thr Val Leu Met Val Pro
                            200
                                                205
Phe Val Ser Ile Val Ile Ser Tyr Val Arg Ile Val Phe Ala Val Leu
                        215
                                            220
Arg Val Gln Thr Ser Gly Gly Ser Ser Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Leu Cys Val Val Cys Val Phe Tyr Gly Thr Leu Phe Ser Val
               245
                                    250
Tyr Leu Phe Pro Ser Ser Gly Glu Thr Thr Glu Lys Asp Val Val Ala
            260
                                265
Ala Ala Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
       275
                            280
Ser Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Lys Arg Leu Lys Cys
                        295
His Arg Arg Lys Phe Ser Pro
                    310
```

<211> 315

<212> PRT

<213> Mus musculus

<400> 1485

Met Ser Cys Ile Ile Arg Asn Asn His Ser Ile Thr Ser Glu Phe Ile Leu Leu Gly Leu Pro Ile Asn Pro Glu Leu Asn Gly Met Tyr Ser Ala 20 25 Leu Phe Leu Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile 40 Ile Leu Leu Ile Arg Leu Asp Pro His Leu His Thr Pro Met Tyr Phe 55 Phe Leu Ser His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr 70 75 Ala Pro Lys Met Leu Val Asn Met Leu Thr His Ser Gln Ser Ile Ser 85 90 Tyr Thr Gly Cys Ile Ser Gln Val Tyr Phe Phe Leu Phe Phe Ala Asp 100 105 Leu Asp Ser Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala 120 Ile Cys His Pro Leu His Tyr Thr Thr Ile Met Ser Gln Ser Leu Cys 130 135 140 Val Leu Leu Ile Val Ser Trp Val Leu Ser Phe Ala Ser Ala Ile 150 155 Leu His Thr Leu Leu Leu Ala His Leu Ser Phe Ser Gly Gly Asn Thr 165 170 Leu Pro His Phe Phe Cys Asp Leu Ser Ala Leu Leu Lys Leu Ser Ser 185 Ser Asp Thr Thr Ile Asn Glu Leu Val Ile Phe Thr Val Gly Val Val 200 Ile Ile Thr Val Pro Leu Ile Cys Ile Leu Val Ser Tyr Gly Tyr Ile 215 220 Gly Ala Thr Ile Leu Arg Thr Pro Ser Ile Lys Gly Ile Tyr Lys Ala

225 230 • 235 Leu Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Tyr Tyr Gly 250 245 Ala Ile Ile Gly Leu Tyr Ser Phe Pro Ser Pro Asn Asn Ser Asn Asn 265 260 Lys Asp Val Ile Val Ala Val Met Tyr Thr Met Val Thr Pro Met Leu 280 Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Ala Leu 295 300 Arg Asn Ile Leu Gly Arg Lys Ala Ser Ser Gln 310 <210> 1486 <211> 317 <212> PRT <213> Mus musculus <400> 1486 Met Gly Lys Ile Ser Arg Val Asn Gln Ser Val Ala Ser Asp Phe Leu Leu Leu Gly Leu Ser Glu Gln Pro Gly Glu Gln Pro Leu Leu Phe Gly 25 Ile Phe Leu Gly Met Tyr Leu Val Thr Met Val Gly Asn Leu Leu Ile 40 Ile Phe Val Ile Ser Ser Asp Ala His Leu His Thr Pro Met Tyr Phe 55 60 Phe Leu Ala Asn Leu Ser Leu Thr Asp Ala Cys Phe Thr Ser Ala Ser 75 Val Pro Lys Met Leu Ala Asn Ile Tyr Thr Gln Ser Gln Thr Ile Ser 90 Tyr Ser Gly Cys Leu Thr Gln Leu Tyr Phe Leu Leu Met Phe Gly Gly 100 105 Leu Asp Asn Cys Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala 120 Ile Cys Gln Pro Leu His Tyr Ser Thr Ala Met Ser Pro Gln Leu Cys 135 140 Ala Leu Met Leu Cys Thr Cys Trp Val Leu Thr Asn Cys Pro Ala Leu 150 155 Met His Thr Leu Leu Thr Arg Val Ala Phe Cys Ala His Thr Ala 170 165 Ile Pro His Phe Tyr Cys Asp Pro Ser Ala Leu Leu Lys Leu Ala Cys 185 Ser Asp Thr His Ile Asn Glu Leu Met Ile Ile Thr Met Gly Leu Val 195 200 Phe Leu Ala Val Pro Leu Met Leu Ile Val Phe Ser Tyr Val Cys Ile 215 Ser Trp Ala Val Leu Gly Ile Pro Ser Ser Gly Gly Arg Trp Lys Ala 230 235 Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Leu Leu Phe Tyr Gly 250 245 Ser Leu Met Gly Val Tyr Leu Leu Pro Pro Ser Thr His Ser Thr Glu 265 Arg Glu Ser Arg Ala Ala Val Leu Tyr Met Ile Val Ile Pro Met Leu 280 285

Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Glu Ala Met

300

<210> 1487 <211> 309 <212> PRT <213> Mus musculus <400> 1487 Met Arg Met Asp Asn Glu Ser Thr Val Ser Glu Phe Ile Leu Leu Gly 10 Leu Pro Ile Arg Ala Lys Asp Gln Ala Val Tyr Ser Ala Leu Ile Leu 25 Ala Met Tyr Leu Thr Thr Val. Leu Gly Asn Leu Leu Ile Ile Leu Leu 40 Ile Arg Leu Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 His Leu Ala Leu Thr Asp Ile Ser Phe Ser Ser Val Thr Val Pro Arg 70 75 Met Leu Val Asn Met Leu Thr Gln Ser Gln Ser Ile Ser Tyr Thr Gly 90 Cys Ile Ser Gln Val Tyr Phe Phe Ile Val Phe Gly Ser Ile Asp Ser 105 Phe Leu Leu Pro Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 Pro Leu His Tyr Thr Leu Ile Met Asn Leu Asn Leu Cys Val Leu Leu 135 140 Val Val Val Ser Trp Ala Leu Ser Leu Val Asn Ala Leu Val His Thr 150 155 Leu Leu Leu Ala Arg Leu Ser His Phe Arg Asn Asn Ile Ile Pro His 165 170 Tyr Phe Cys Asp Leu Ser Ala Leu Leu Lys Leu Ser Ser Ser Asp Thr 185 190 Ser Ile Asn Glu Leu Val Ile Leu Val Leu Gly Asn Val Val Ile Thr 200 205 Leu Pro Phe Ile Cys Ile Leu Val Ser Tyr Gly Tyr Ile Gly Val Thr 215 220 Ile Leu Lys Thr Pro Ser Thr Lys Gly Ile Arg Lys Ala Leu Ser Thr 230 235 Cys Gly Ser His Leu Cys Val Val Ser Leu Tyr Tyr Gly Ser Val Ile 245 250 Gly Leu Tyr Cys Val Pro Ser Ser Asn Asn Thr Asn Asp Lys Asp Ala 265 Ile Val Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe 280 Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Arg Asn Ile 295 Leu Ser Arg Lys Lys 305

<210> 1488

<211> 316

<212> PRT

<213> Mus musculus

```
Phe Ser Ala Phe Pro His Gln Met Leu Pro Ala Leu Phe Leu Leu Tyr
                                25
Leu Leu Met Tyr Leu Phe Thr Leu Leu Gly Asn Leu Val Ile Met Ala
                           40
Ala Ile Trp Thr Glu His Arg Leu His Thr Pro Met Tyr Leu Phe Leu
                       55
Cys Ala Leu Ser Ile Ser Glu Ile Leu Phe Thr Val Val Ile Thr Pro
                                        75
Arg Met Leu Ser Asp Met Leu Ser Thr His Arg Ser Ile Thr Phe Ile
               85
                                    90
Ala Cys Ala Asn Gln Leu Phe Phe Ser Phe Thr Phe Gly Tyr Thr His
                                105
Ser Phe Leu Leu Val Val Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys
                            120
Arg Pro Leu His Tyr His Ala Leu Met Ser Leu Gln Gly Cys Ala Arg
                       135
Leu Val Ala Trp Ser Trp Ala Gly Gly Ser Leu Ile Gly Met Ala Leu
                150
                                       155
Thr Ile Ile Ile Phe His Leu Thr Phe Cys Glu Ser Asn Val Ile His
                                    170
               165
His Ile Leu Cys His Val Phe Ser Leu Leu Lys Leu Ala Cys Gly Glu
           180
                                185
Arg Thr Ala Phe Val Thr Ile Ala Val Ile Leu Val Cys Val Thr Pro
       195
                           200
                                               205
Leu Ile Gly Cys Leu Val Phe Ile Ile Leu Ser Tyr Ile Phe Ile Val
                       215
                                            220
Ala Ala Ile Leu Arg Ile Pro Ser Thr Glu Gly Arg His Lys Thr Phe
                    230
                                        235
Ser Thr Cys Ala Ser His Leu Thr Val Val Ile Val His Tyr Gly Phe
                245
                                    250
Ala Ser Ile Ile Tyr Leu Lys Ser Arg Gly Leu Tyr Ser Gln Tyr Thr
                               265
Asp Thr Leu Met Ser Thr Thr Tyr Thr Val Phe Thr Pro Phe Leu Ser
                           280
                                               285
Pro Ile Ile Phe Ser Leu Arg Asn Lys Glu Leu Lys Asn Ala Ile Ile
                       295
Lys Ser Phe His Arg Asn Val Cys Gln Gln Ser Ile
                    310
<210> 1489
<211> 315
<212> PRT
<213> Mus musculus
<400> 1489
Met Glu Glu Gly Asn Gln Thr Gly Met Val Leu Phe His Phe Arg Pro
                                   10
Phe Ser Lys Leu Pro Glu Val Gln Met Leu Ile Phe Val Leu Phe Leu
                                25
Met Met Tyr Leu Val Ser Ile Gly Gly Asn Met Ser Ile Val Leu Thr
                            40
                                                45
Ile Trp Thr Asn Arg Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ala
    50
                        55
```

Met Pro Gly Gln Asn Tyr Ser Thr Ile Ser Glu Phe Ile Leu Phe Gly

<400> 1488

```
Asn Leu Ala Ser Leu Glu Ile Phe Tyr Ser Ser Thr Ile Ala Pro Leu
                                        75
Thr Leu Ala Ser Ile Leu Ser Thr Glu Arg Thr Val Val Ser Leu Ala
                                    90
Gly Cys Gly Ala Gln Met Phe Phe Phe Ile Phe Leu Gly Ser Ala Asp
                               105
Cys Ile Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
                           120
His Pro Leu Arg Tyr Thr Leu Ile Met Ser Trp His Leu Cys Val Gln
                       135
                                           140
Leu Ala Leu Gly Ser Leu Leu Leu Gly Phe Ile Leu Ala Met Gln Leu
                   150
                                       155
Thr Val Leu Ile Phe Arg Leu Pro Phe Cys Ser Ser Lys Glu Ile Ser
               165
                                   170
Leu Phe Tyr Cys Asp Val Leu Pro Val Met Arg Leu Ala Cys Ala Asp
           180
                                185
Thr His Val His Glu Ala Thr Leu Phe Val Val Ser Val Ile Val Leu
                            200
Thr Ile Pro Phe Leu Leu Ile Thr Leu Ser Tyr Val Phe Ile Val Asp
                       215
                                            220
Ala Ile Leu Lys Ile Arg Ser Ala Glu Gly Arg His Lys Ala Phe Ser
                  230
                                       235
Thr Cys Ser Ser His Leu Thr Val Val Leu Leu Gln Tyr Gly Cys Gly
                                   250
               245
Ser Leu Ile Tyr Leu Cys Pro Ser Ser Ser Tyr Ser Pro Glu Arg Gly
           260
                               265
Gln Val Val Ser Val Val Tyr Thr Phe Ile Thr Pro Val Leu Asn Pro
       275
                           280
                                               285
Leu Ile Tyr Ser Met Arg Asn Arg Glu Leu Lys Asp Ala Leu Arg Lys
                       295
Val Val Ile Ser Phe Leu Leu Glu Lys Gln
                   310
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1490

Met Asp Ser Tyr Asn Gln Thr Phe Thr Gly Phe Ile Leu Leu Gly Leu 10 Phe Pro Pro Ser Lys Ile Gly Leu Phe Leu Phe Ile Leu Ile Val Leu Ile Phe Leu Thr Ala Trp Ile Gly Asn Leu Ser Met Ile Leu Leu Ile 40 Leu Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Leu Leu Ser Gln 55 Leu Ser Leu Ile Asp Leu Asn Tyr Ile Ser Thr Ile Val Pro Lys Met 70 75 Val Ser Asp Phe Met Leu Gly Asn Lys Tyr Ile Ser Phe Ile Gly Cys 90 85 Gly Phe Gln Ile Phe Leu Phe Leu Thr Phe Gly Gly Ala Glu Thr Leu 105 100 Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro 120 Leu His Tyr Ala Thr His Met Asn Lys Arg Val Cys Val Met Met Ile

```
130
                       135
Thr Gly Ala Trp Ile Leu Gly Ser Ile Asn Ser Cys Ala His Thr Gly
                    150
                                        155
Tyr Ala Leu Gln Ile Pro Tyr Cys Arg Ser Arg Ala Ile Asn His Phe
                                    170
                165
Phe Cys Asp Val Pro Ala Met Leu Thr Leu Ala Cys Thr Asp Thr Trp
           180
                                185
Val Tyr Glu Tyr Thr Val Phe Val Ser Thr Ile Leu Phe Leu Val Phe
                            200
                                                205
Pro Phe Ile Gly Ile Val Cys Ser Tyr Gly Arg Val Phe Leu Ala Ile
                        215
                                            220
Tyr Arg Met His Ser Arg Ala Gly Lys Lys Lys Ala Tyr Ser Thr Cys
                   230
                                        235
Ser Thr His Leu Thr Val Val Thr Phe Tyr Tyr Ala Pro Phe Ala Tyr
                245
                                    250
Thr Tyr Leu Arg Pro Arg Ser Leu Arg Ser Pro Glu Glu Asp Lys Ile
            260
                                265
                                                    270
Leu Ala Val Phe Tyr Thr Val Leu Thr Pro Met Leu Asn Pro Ile Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Ile Gly Ala Leu Arg Arg Met Thr
                       295
His Arg Ile Cys Phe Ala Lys Ile
                    310
```

<210> 1491 <211> 318

<212> PRT

<213> Mus musculus

<400> 1491

Met Asn Trp Ile Leu His Ser Thr Met Val Ser Pro Asn Gln Thr Val Val Thr Glu Phe Val Leu Gln Gly Phe Ser Glu His Pro Ser Leu Arg Leu Phe Leu Met Gly Cys Phe Leu Ser Leu Tyr Thr Val Ala Leu Met Gly Asn Met Val Ile Ile Ala Leu Ile Thr Ser Ser Thr Gly Leu His Ser Pro Met Tyr Phe Phe Leu Cys Asn Leu Ala Thr Met Asp Ile Ile Cys Thr Ser Ser Val Leu Pro Lys Ala Leu Val Gly Leu Leu Ser Glu Glu Asn Thr Ile Ser Phe Lys Gly Cys Met Thr Gln Leu Phe Phe Leu Val Trp Ser Gly Ser Ser Glu Leu Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Leu Pro Leu His Tyr Ser Ser Arg Met Ser Pro Gln Leu Cys Gly Thr Phe Ala Val Gly Val Trp Ser Ile Cys Ala Leu Asn Ala Ser Ile Asn Thr Gly Leu Met Thr Arg Leu Ser Phe Cys Gly Pro Lys Val Ile Thr His Phe Phe Cys Glu Ile Pro Pro Leu Leu Leu Ser Cys Ser Pro Thr Tyr Ile Asn Ser Val Met Thr Leu

```
Val Ala Asp Ala Phe Tyr Gly Gly Ile Asn Phe Leu Leu Thr Leu Leu
                        215
Ser Tyr Gly Cys Ile Ile Ala Ser Ile Leu Arg Met Arg Ser Ala Glu
                    230
                                        235
Gly Lys Arg Lys Ala Phe Ser Thr Cys Ser Ser His Leu Ile Val Val
                                    250
               245
Ser Val Tyr Tyr Ser Ser Val Phe Cys Ala Tyr Ile Ser Pro Gly Ser
                               265
Ser Tyr Ser Pro Glu Arg Ser Lys Phe Thr Ser Val Leu Tyr Ser Val
                            280
Leu Ser Pro Thr Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp
                        295
                                            300
Val Lys Leu Ala Leu Arg Arg Leu Phe Pro Ser Phe Ser Asn
                    310
```

<211> 322

<212> PRT

<213> Mus musculus

<400> 1492

Met Pro Leu Glu Ala Glu Ser Ile Met Arg Asn Ser Thr Ala Val Thr 10 Asp Phe Ile Leu Leu Gly Leu Thr Asp Asp Pro Leu Trp Gln Ile Val 20 25 Val Phe Thr Phe Leu Leu Val Thr Tyr Met Leu Ser Val Thr Gly Asn 40 45 Leu Ile Ile Ile Leu Thr Leu Ser Asp Ala His Leu Met Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe Ser Leu Leu Glu Ile Ser Phe Thr 70 75 Ser Val Cys Ile Pro Arg Phe Leu Val Thr Ile Val Thr Gly Asp Arg 90 Thr Ile Ser Tyr Asn Gly Cys Val Ala Gln Leu Phe Phe Phe Ile Phe 100 105 Leu Gly Val Thr Glu Phe Tyr Leu Leu Ala Ala Met Ser Tyr Asp Arg 120 125 Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Thr Thr Ile Met Ser Asn 135 140 Arg Val Cys Ile Leu Leu Val Phe Ser Ser Trp Phe Ala Gly Phe Met 150 155 Ile Ile Phe Pro Pro Ile Ile Leu Leu Gln Leu Asp Phe Cys Ala 165 170 Ser Asn Ile Ile Asp His Phe Ile Cys Asp Ser Ser Pro Ile Leu Gln 180 185 Leu Ser Cys Ser Asn Thr His Phe Leu Glu Leu Met Ala Phe Ser Leu 195 200 205 Ala Val Val Thr Leu Met Val Thr Leu Thr Leu Ile Ile Leu Ser Tyr 215 220 Thr Asn Ile Ile Arg Thr Ile Leu Arg Ile Pro Ser Thr Asn Gln Arg 230 235 Lys Lys Ala Phe Ser Thr Cys Ser Ser His Met Ile Val Val Ser Leu 245 250 Ser Tyr Gly Ser Cys Ile Phe Met Tyr Ile Lys Pro Ser Ala Arg Glu 265 Arg Val Thr Leu Ser Lys Gly Val Ala Val Leu Asn Thr Ser Val Ala

275 280 285 Pro Leu Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn Gln Gln Val Lys 295 300 Gln Ala Phe Lys Asn Met Ile Gln Arg Ile Phe Phe Ser Ser Lys Asn 310 315 Leu Pro <210> 1493 <211> 312 <212> PRT <213> Mus musculus <400> 1493 Met Ser Asn His Thr Glu Thr Thr Glu Phe Ile Leu Leu Gly Leu Ser 1 10 Asp Asp Pro Lys Leu Gln Val Val Ile Phe Val Phe Leu Phe Ile Thr 20 25 Tyr Thr Leu Ser Ile Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu 40 Leu Asp Ser His Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe 55 Ser Val Leu Glu Val Ser Phe Thr Thr Val Thr Ile Pro Lys Phe Leu 70 75 Gly Thr Ile Ile Ser Gly Asp Lys Thr Ile Ser Phe Asn Asn Cys Ile 85 90 Ala Gln Leu Phe Phe Phe Ile Leu Leu Gly Val Thr Glu Phe Tyr Leu 105 Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 His Tyr Leu Thr Ile Met Ser Gln Lys Val Cys Thr Met Leu Val Phe 135 Ala Ser Trp Leu Thr Ser Phe Leu Ile Ile Phe Pro Ala Leu Met Leu 150 155 Leu Leu Gln Leu Asp Tyr Cys Gly Ser Asn Ile Ile Asp His Tyr Thr 165 170 Cys Asp Tyr Phe Pro Leu Leu Gln Leu Ser Cys Ser Asp Thr Lys Phe 180 185 Leu Glu Arg Met Gly Phe Ser Cys Ala Val Phe Thr Leu Met Leu Thr 195 200 205

Leu Val Leu Ile Phe Leu Ser Tyr Thr Tyr Ile Ile Lys Thr Ile Val 215 Lys Ile Pro Ser Ala Ser Gln Arg Ser Lys Ala Phe Ser Thr Cys Ser 230 235 Ser His Met Ile Val Ile Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met 250 Tyr Ile Lys Pro Ser Ala Thr Asp Arg Ala Ser Leu Thr Lys Gly Val 260 265 Ala Ile Leu Asn Thr Ser Val Ala Pro Met Leu Asn Pro Phe Ile Tyr 280 285 Ser Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Met Asn Met Thr Arg 295 300 Lys Ile Val Phe Ser Thr Ser Lys 305 310

```
<211> 310
<212> PRT
<213> Mus musculus
<400> 1494
Met Asp Glu Glu Asn Gln Thr Thr Thr Glu Phe Leu Leu Gly
                                   10
Phe Ser Asp Leu Arg Ala Leu Gln Gly Pro Leu Phe Trp Leu Val Leu
                               25
Leu Val Tyr Leu Ile Thr Phe Leu Gly Asn Ser Leu Ile Ile Phe Leu
       35
                           40
                                               45
Thr Gln Thr Ser Pro Val Leu His Ser Pro Met Tyr Phe Phe Leu Arg
                       55
His Leu Ser Met Val Glu Leu Leu Tyr Thr Thr Asp Ile Val Pro Arg
                   70
                                       75
Val Leu Ala Asp Leu Thr Ser Ser His Pro Gln Ala Ile Ser Phe Arg
                                   90
Ser Cys Ala Ala Gln Met Tyr Phe Phe Ile Val Leu Gly Ile Ser Glu
                               105
Cys Cys Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys
                           120
Gln Pro Leu His Tyr Ser Thr Leu Met Asn His Arg Ala Cys Ile Ala
                       135
                                           140
Met Val Gly Thr Ser Trp Ile Met Gly Ile Ile Thr Ala Thr Thr His
                   150
                                       155
Ser Ser Leu Ile Phe Thr Leu Pro Phe Pro Ser Arg Pro Ile Ile Pro
               165
                                   170
His Phe Leu Cys Asp Ile Leu Pro Val Leu Arg Leu Ala Ser Ala Gly
                               185
Lys His Arg Ser Glu Ile Ser Val Met Thr Ala Thr Val Val Phe Ile
                            200
Met Ile Pro Phe Ser Leu Ile Val Thr Ser Tyr Ala Arg Ile Leu Gly
                       215
                                            220
Ala Ile Leu Ala Ile Ala Ser Ser Gln Ser Arg Arg Lys Val Phe Ser
                   230
                                       235
Thr Cys Ser Ser His Leu Leu Val Val Ser Leu Phe Phe Gly Thr Ala
                                   250
               245
Ser Ile Thr Tyr Ile Arg Pro Arg Ala Gly Ser Ser Val Thr Thr Asp
                               265
Arg Ile Leu Ser Leu Phe Tyr Thr Val Val Thr Pro Met Leu Asn Pro
                           280
                                               285
Ile Ile Tyr Thr Leu Arg Asn Lys Glu Val Ile Gly Ala Leu Lys His
                       295
Met Lys Arg Gln Val Pro
305
<210> 1495
<211> 312
<212> PRT
<213> Mus musculus
<400> 1495
Met Arg Asn His Ser Ser Ile Thr Thr Phe Ile Leu Leu Gly Leu Thr
                                   10
Asp Asp Pro Gln Leu Gln Val Leu Leu Phe Ile Phe Leu Phe Leu Thr
```

```
25
Tyr Met Leu Ser Val Thr Gly Asn Leu Ile Ile Ile Leu Thr Leu
Val Asp Pro His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
                        55
Ser Phe Leu Glu Val Ser Phe Thr Thr Val Cys Ile Pro Arg Phe Leu
                   70
                                        75
Tyr Ser Ile Ser Ser Gly Asp Asn Thr Ile Thr Tyr Asn Ala Cys Ala
                                    90
               85
Ser Gln Ile Phe Phe Val Ile Leu Phe Gly Ala Thr Glu Phe Phe Leu
           100
                                105
                                                    110
Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
       115
                            120
                                                125
His Tyr Met Thr Ile Met Asn Pro Arg Val Cys Ile Leu Leu Val Ile
                        135
Thr Cys Trp Val Ser Gly Leu Met Ile Ile Thr Pro Pro Leu Ile Leu
                    150
                                        155
Gly Leu Gln Leu Asp Phe Cys Asp Ser Asn Ala Ile Asp His Phe Ser
                165
                                    170
Cys Asp Ala Gly Pro Leu Leu Lys Ile Ser Cys Ser Asp Thr Trp Val
                               185
Ile Glu Gln Met Val Ile Leu Val Ala Val Phe Ala Leu Ile Ile Thr
                            200
                                                205
Leu Ile Cys Val Ile Leu Ser Tyr Thr Tyr Ile Ile Arg Thr Ile Leu
                        215
                                            220
Arg Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                                        235
                   230
Ser His Met Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile
                                    250
Tyr Ile Lys Pro Ser Ala Lys Asp Glu Val Ala Ile Asn Lys Gly Val
            260
                                265
Ser Val Leu Thr Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
                            280
Thr Leu Arg Asn Lys Gln Val Lys Gln Ala Phe Ser Asp Ser Val Lys
                       295
                                            300
Arg Ile Thr Phe Ile Ser Lys Ser
                    310
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1496

 Met
 Arg
 Asn
 His
 Thr
 Leu
 Val
 Thr
 Thr
 Phe
 Ile
 Leu
 Leu
 Gly
 Leu
 Thr
 15
 Thr
 10
 Leu
 Leu
 Leu
 Phe
 Leu
 Phe
 Leu
 Phe
 Met
 Thr
 Thr
 15
 Thr
 10
 Leu
 Phe
 Leu
 Phe
 Met
 Thr
 10
 Leu
 Phe
 Leu
 Phe
 Met
 Thr
 10
 Leu
 Phe
 Leu
 Phe
 Met
 Thr
 30
 Thr
 Thr
 25
 Thr
 11e
 Ile
 Leu
 Phe
 Leu
 Thr
 Thr
 Leu
 Thr
 Thr
 Leu
 Thr
 Thr

```
Thr Gln Leu Phe Ala Ala Phe Ile Phe Gly Ile Ala Gln Phe Phe Leu
                               105
Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu
                           120
His Tyr Thr Thr Ile Met Asn Asn Arg Val Cys Thr Leu Leu Phe Val
                       135
Ser Cys Cys Leu Ile Ala Val Phe Ala Ile Cys Pro Gly Val Ile Val
                   150
                                       155
Ser Leu Ser Leu Glu Phe Cys Asp Thr Ile Ile Glu His Phe Phe Cys
                                   170
Asp Tyr Ser Pro Ile Leu Lys Leu Ser Cys Asn Asp Thr Arg Phe Met
           180
                               185
Gln Leu Leu Asn Phe Ile Phe Ala Ile Phe Ile Leu Leu Met Thr Leu
                           200
Ala Leu Val Met Phe Ser Tyr Gly Lys Ile Ile Ser Thr Ile Leu Arg
                       215
                                            220
Phe Pro Ser Ala Gln Gln Lys Lys Ala Phe Ser Thr Cys Ser Ser
                   230
                                        235
His Met Ile Val Val Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met Tyr
               245
                                   250
Ile Lys Pro Ser Ala Glu Glu Arg Ile Tyr Leu Asn Lys Gly Ile Ala
                               265
Ile Leu Thr Leu Ala Leu Ala Pro Val Leu Asn Pro Phe Ile Tyr Thr
                           280
                                               285
Leu Arg Asn Lys Gln Val Lys Glu Ala Leu Lys Asp Ile Ile Lys Lys
                       295
Cys Thr Ser Ala Thr Ser Lys
305
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1497

Met Pro Asn Lys Thr Ser Ile Thr Glu Phe Ile Leu Leu Gly Leu Thr 10 Asp Asp Pro Glu Leu Gln Ile Val Ile Phe Phe Phe Leu Leu Ala Thr 25 Tyr Leu Leu Ser Val Ser Gly Asn Met Thr Ile Ile Thr Leu Thr Leu 40 Ser Asn Val His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe 55 Ser Phe Leu Glu Ile Leu Phe Thr Thr Val Cys Ile Pro Arg Phe Leu 75 Ile Ser Ile Ile Thr Gly Asn Thr Ala Ile Ser Tyr Asn Ala Cys Met 8.5 90 Ala Gln Val Phe Phe Leu Ile Phe Leu Gly Ala Thr Glu Phe Phe Leu 105 Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Thr Ala Ile Ile Asn Asn Lys Val Cys Asn Gln Leu Val Ile 135 Ala Ser Trp Ser Ala Gly Phe Leu Ile Val Phe Pro Pro Val Ile Met 150 155 Gly Leu Gln Leu Glu Phe Cys Asp Ser Asn Ile Ile Asp His Phe Thr

```
165
                                    170
Cys Asp Ser Ser Pro Met Leu Gln Ile Ala Cys Thr Asp Thr Lys Ile·
            180
                                185
Leu Glu Leu Met Ala Phe Phe Leu Ala Val Phe Thr Leu Ile Val Thr
                            200
Leu Ala Leu Val Ile Leu Ser Tyr Thr Leu Ile Leu Arg Thr Ile Leu
                        215
                                            220
Lys Ile Pro Ser Ala Glu Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Ile Val Val Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met
                245
                                    250
Tyr Val Lys Thr Ser Ala Arg Glu Gly Val Val Leu Ser Lys Gly Val
           260
                                265
Ala Met Leu Asn Thr Ser Val Ala Pro Met Leu Asn Pro Phe Ile Tyr
                            280
                                                285
Thr Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Lys Asp Phe Thr Arg
                        295
                                            300
Lys Leu Leu Ala Ser Lys Lys His
                    310
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1498

Met Lys Asn Arg Thr Val Thr Thr Phe Ile Leu Leu Gly Leu Thr Asp Asp Ile Arg Leu Gln Thr Leu Leu Phe Ile Phe Leu Leu Phe Ser Tyr Met Leu Ser Leu Ser Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu Ile Asp Pro His Leu Lys Thr Pro Met Tyr Ile Phe Leu Lys Asn Phe Ser 55 60 Phe Leu Glu Ile Ser Leu Thr Thr Ala Cys Ile Pro Arg Phe Leu Tyr 75 Ser Leu Ser Ser Gly Asp Lys Ser Ile Ala Tyr Ala Ala Cys Ile Ser 85 90 Gln Leu Leu Phe Ile Asp Ile Phe Ala Val Thr Glu Phe Phe Leu Leu 105 100 110 Ala Ile Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His 120 Tyr Met Thr Ile Met Asn Ser Arg Val Cys Lys Asn Phe Ile Phe Phe 135 Cys Trp Val Ala Ala Leu Ile Ile Val Leu Pro Pro Ile Ser Leu Gly 150 155 Leu Gly Leu Glu Phe Cys Asp Ser Asp Ile Val Asp His Phe Cys Cys 165 170 175 Asp Ala Ala Pro Leu Leu Lys Ile Ser Cys Ser Asp Thr Trp Leu Ile 185 Glu Gln Met Val Ile Ala Gly Ala Val Leu Thr Phe Ile Ile Thr Phe 195 200 205 Val Cys Val Val Leu Ser Tyr Gly Tyr Ile Ile Lys Thr Ile Leu Arg 215 220 Phe Pro Ser Ala Lys Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser 230 235

```
His Met Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile Tyr
                                    250
Val Lys Pro Ser Ser Lys Asp Asn Val Ala Ile Asn Lys Gly Ile Ser
                                265
Leu Ile Ile Val Ser Ile Ser Pro Met Leu Asn Pro Phe Ile Tyr Ala
                           280
Leu Arg Asn Lys Gln Val Lys Gln Ala Phe Asn Tyr Ser Ile Lys Lys
                       295
Val Ala Phe Leu Ser Lys Met
```

<210> 1499 <211> 310 <212> PRT <213> Mus musculus

<400> 1499

Met Glu Ala Gln Asn His Thr Thr Val Lys Glu Phe Ile Leu Leu Gly 10 Leu Thr Glu Asn Ser Thr Leu Arg Val Ile Leu Phe Met Ile Phe Leu 25 Gly Ile Tyr Thr Val Thr Leu Val Gly Asn Phe Ser Ile Ile Ser Leu 40 Ile Arg Ser Cys Pro Gln Leu His Thr Pro Met Tyr Leu Phe Leu Ser 55 His Leu Ala Leu Val Asp Ile Gly Phe Ser Thr Ser Ile Thr Pro Ile 70 75 Met Leu Thr Gly Phe Leu Gly His Thr Val Thr Leu Ser Val Ala Ala Cys Val Ala Gln Phe Cys Ile Ala Val Thr Phe Gly Thr Val Glu Cys 105 Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser 115 120 125 Pro Leu Leu Tyr Ser Thr His Met Ser Pro Arg Ile Cys Phe Leu Leu 135 Val Gly Ala Ser Tyr Val Gly Gly Cys Val Asn Ser Gly Thr Phe Thr 150 155 Ser Cys Leu Leu Ile Leu Ser Phe Cys Gly Pro Asn Gln Ile Asp His 170 165 Phe Phe Cys Asp Phe Pro Ala Val Leu Lys Leu Ser Cys Ser Asp Val 180 185 Ser Ile Ile Gly Ile Ile Pro Ser Ile Ser Ala Gly Ser Ile Ile Val 200 Ile Thr Val Phe Val Ile Ala Val Ser Tyr Thr Tyr Ile Leu Ile Thr 215 220 Ile Leu Asn Met Arg Ser Thr Glu Gly Arg His Lys Ala Phe Ser Thr 230 235 Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly Thr Ile Thr 245 250 Phe Ile Tyr Val Met Pro Lys Ser Asn Tyr Ser Thr Ala Gln Asn Lys 260 265 Ile Leu Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Arg Asp Val Lys Glu Ala Leu Arg Lys Ala 295 300 Ile Ile Arg Ile Phe Pro

<400> 1501

```
<211> 312
<212> PRT
<213> Mus musculus
<400> 1500
Met Glu Thr Glu Asn Asp Thr Met Val Thr Glu Phe Ile Ile Leu Gly
                                    10
Leu Thr Asp Ser Ala Thr Leu Arg Ala Ile Leu Phe Val Phe Phe Leu
           2.0
                                25
Pro Val Tyr Ile Val Thr Val Val Gly Asn Ile Ser Ile Ile Leu Leu
                            40
Ile Arg Ser Ser Pro Gln Leu His Thr Pro Met Tyr Leu Phe Leu Ser
His Leu Ala Phe Val Asp Ile Gly Tyr Ser Thr Ser Val Thr Pro Ile
                    70
                                        75
Met Leu Ile Ser Phe Leu Arg Glu Glu Thr Thr Ile Pro Leu Ala Gly
Cys Ala Ala Gln Leu Gly Ser Asp Val Ala Phe Gly Thr Thr Glu Cys
                                105
           100
Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser
                            120
                                                125
Pro Leu Leu Tyr Ser Thr Gln Met Ser Pro Ala Ile Cys Cys Phe Leu
                       135
                                            140
Leu Gly Ala Ser Tyr Leu Gly Gly Cys Met Asn Ala Ser Ser Phe Thr
                   150
                                        155
Gly Cys Phe Val Asn Leu Asn Phe Cys Gly Pro Asn Lys Val Asn His
                165
                                    170
Phe Phe Cys Asp Leu Phe Pro Leu Val Lys Leu Ser Cys Gly His Ala
            180
                                185
                                                    190
Tyr Ile Ala Glu Ile Ser Pro Ser Ile Ser Ser Ala Ser Val Leu Val
                            200
                                                205
Ser Thr Leu Ser Thr Ile Ile Val Ser Tyr Ile Tyr Ile Leu His Ser
                       215
                                            220
Ile Leu Arg Met Arg Ser Ala Glu Gly Arg Asn Lys Ala Phe Ser Thr
                    230
                                        235
Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Thr Val Leu
                                   250
                245
Phe Val Tyr Val Met Pro Lys Ser Ser Tyr Ser Ala Asp Gln Val Lys
                                265
Val Ala Ser Val Val Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Met Lys Lys Leu
                        295
Met Ala Arg Thr His Trp Phe Pro
                    310
<210> 1501
<211> 310
<212> PRT
<213> Mus musculus
```

```
Met Glu Thr Gln Asn His Thr Thr Val Thr Glu Phe Ile Leu Leu Gly
Leu Thr Glu Ser Ser Thr Leu Arg Val Ile Leu Phe Met Val Phe Leu
Gly Ile Tyr Thr Val Thr Leu Val Gly Asn Phe Ser Ile Ile Ser Leu
Ile Arg Ser Cys Pro Gln Leu His Thr Pro Met Tyr Leu Phe Leu Ser
His Leu Ala Phe Val Asp Ile Gly Phe Ser Thr Ser Ile Thr Pro Thr
                                        75
Met Phe Lys Gly Phe Leu Gly Asn Arg Leu Val Leu Ser Val Ala Ala
                85
                                    90
Cys Ile Ala Gln Phe Cys Ile Thr Val Thr Phe Gly Thr Val Glu Cys
           100
                                105
Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser
                            120
                                                125
Pro Leu Leu Tyr Ser Thr His Met Ser Pro Arg Ile Cys Phe Leu Leu
                        135
Val Gly Ala Ser Tyr Val Gly Gly Cys Val Asn Ser Gly Ala Phe Thr
                   150
                                        155
Ser Cys Leu Ser Ile Leu Ser Phe Cys Gly Pro Asn Gln Ile Asp His
                                   170
Phe Phe Cys Asp Phe Pro Ala Val Leu Lys Leu Ser Cys Ser Asp Val
                               185
           180
Ser Ile Ile Gly Ile Ile Pro Ser Ile Ser Ala Gly Ser Ile Ile Val
                            200
Ile Thr Val Phe Val Ile Ala Val Ser Tyr Ala Tyr Ile Leu Ile Thr
                       215
                                            220
Ile Leu Lys Met Arg Ser Thr Glu Gly Arg Gln Lys Ala Phe Ser Thr
                                        235
Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly Thr Ile Thr
                245
                                    250
Phe Ile Tyr Val Met Pro Lys Ser Asn Tyr Ser Thr Ala Gln Asn Lys
                                265
Ile Leu Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
                           280
                                                285
Ile Tyr Ser Leu Arg Asn Arg Asp Val Lys Glu Ala Leu Arg Lys Ala
                       295
Ile Ile Arg Ile Phe Pro
305
```

<210> 1502 <211> 314 <212> PRT

<213> Mus musculus

<400> 1502

 Met
 Ala
 Glu
 Gly
 Asn
 Gln
 Thr
 Val
 Ile
 Phe
 Gln
 Phe
 Leu
 Leu
 Leu
 Gly
 Leu
 Gly
 Ile
 Ile
 Ile
 Phe
 Leu
 Ile
 I

```
65
                    70
                                        75
Leu Leu Gln Asn Met Gln Ser Gln Asp Ser Ser Ile Thr Tyr Ala Gly
                                    90
                8.5
Cys Leu Thr Gln Met Tyr Phe Phe Leu Leu Phe Gly Asp Leu Glu Ser
                                105
Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Phe
                           120
Pro Leu His Tyr Met Ser Ile Met Ser Pro Ser Leu Cys Val Ser Leu
                       135
                                            140
Val Leu Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr
                   150
                                        155
Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His
        . 165
                                   170
Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ser Cys Ser Asp Thr
                               185
His Val Asn Glu Leu Val Ile Phe Val Thr Gly Gly Leu Ile Leu Val
        195
                            200
                                                205
Ile Pro Phe Val Leu Ile Leu Val Ser Tyr Ala Arg Ile Val Ser Ser
                        215
Ile Leu Lys Val Pro Ser Ala Arg Gly Ile Arg Lys Ala Phe Ser Thr
                   230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Ile
                245
                                    250
Gly Leu Tyr Leu Cys Pro Ser Ala Asp Asn Ser Thr Val Lys Glu Thr
           260
                                265
Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
       275
                                               285
                            280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Ala Arg Val
                       295
Ile Cys Lys Lys Val Phe Phe Cys Leu
                    310
<210> 1503
<211> 317
<212> PRT
<213> Mus musculus
<400> 1503
Met Gln Gly Thr Thr Glu Arg Asn Gln Thr Ala Ile Ser Gln Phe Leu
                                    10
Leu Leu Gly Leu Pro Ile Pro Thr Glu His Gln His Leu Phe Tyr Ala
            20
                                25
Leu Phe Leu Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile
Ile Ile Leu Ile His Leu Asp Ser His Leu His Thr Pro Met Tyr Ser
```

55 Phe Leu Ser Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr 75 70 Met Pro Lys Leu Leu Gln Asn Met Gln Ser Gln Asp Pro Ser Ile Pro 90 Tyr Ala Gly Cys Leu Ala Gln Met Tyr Phe Phe Leu Phe Phe Ala Asp 105 100 110 Leu Glu Ser Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala 120 115 125 Ile Cys Phe Pro Leu His Tyr Met Ser Ile Met Ser Pro Arg Leu Cys 135 130 140

```
Val Ser Leu Val Leu Leu Ser Trp Val Leu Thr Thr Phe His Ala Met
                    150
                                        155
Leu His Thr Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val
                165
                                    170
Ile Pro His Phe Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ser Cys
            180
                                185
Ser Asp Thr Tyr Val Asn Glu Leu Val Ile Phe Val Met Gly Ser Leu
                           200
Ile Leu Val Ile Pro Phe Val Leu Ile Leu Val Ser Tyr Ala Arg Ile
                       215
                                            220
Val Ser Ser Ile Leu Lys Val Pro Ser Ala Arg Gly Ile Arg Lys Ala
                    230
                                        235
Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly
               245
                                    250
Thr Val Ile Gly Leu Tyr Leu Cys Pro Ser Ala Asp Asn Ser Thr Val
            260
                                265
Lys Glu Thr Val Met Ala Met Met Tyr Thr Val Val Thr Pro Met Leu
                            280
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu
                       295
Ile Ser Val Leu Cys Lys Lys Ile Leu Phe Cys Leu
                    310
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1504

Met Thr Glu Arg Asn Lys Thr Val Ile Ser Gln Phe Leu Leu Gly 10 Leu Pro Ile Pro Pro Glu His Gln Gln Leu Phe Tyr Ala Leu Phe Leu 25 Val Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu 40 Ile Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser 55 Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys 70 75 Leu Leu Gln Asn Met Gln Ser Gln Val Pro Ser Ile Pro Tyr Ala Gly 85 90 Cys Leu Ala Gln Ile Tyr Phe Phe Leu Phe Phe Gly Asp Leu Gly Asn 105 Phe Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Tyr 120 125 Pro Leu His Tyr Thr Thr Ile Met Ser Pro Arg Leu Cys Val Ser Leu 135 140 Val Val Leu Ser Trp Val Leu Thr Thr Phe His Ala Met Leu His Thr 150 155 Leu Leu Met Ala Arg Leu Ser Phe Cys Glu Asp Asn Val Ile Pro His 165 170 Tyr Phe Cys Asp Met Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Thr 180 185 Arg Val Asn Glu Val Val Ile Phe Ile Val Ala Ser Ile Phe Leu Val 200 Leu Pro Phe Ala Leu Ile Thr Met Ser Tyr Val Arg Ile Val Ser Ser

210 215 Ile Leu Lys Val Pro Ser Ser Gln Gly Ile Tyr Lys Ala Phe Ser Thr 230 235 Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Val Ile 250 245 Gly Leu Tyr Leu Ser Pro Ser Ser Asn Asn Ser Thr Val Lys Asp Thr 265 Val Met Ser Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe 280 285 Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Ala Leu Glu Arg Val 295 Phe Cys Lys Arg Lys Ile Gln Leu Asn Leu 310

<210> 1505 <211> 313 <212> PRT <213> Mus musculus

<400> 1505

Met Pro Gly Glu Asn Val Thr Val Trp Ser Leu Phe Phe Leu Glu Gly 10 Phe Ser Arg Tyr Pro Arg Leu Glu Ile Val Leu Phe Val Phe Ser Leu 25 Val Met Tyr Leu Val Thr Ile Leu Gly Asn Cys Thr Leu Ile Leu Ile 40 Thr Val Leu Asp Ser Arg Leu Gln Thr Pro Met Tyr Leu Phe Leu Gly 55 Asn Leu Ser Phe Met Asp Ile Cys Tyr Thr Ser Ala Ser Ile Pro Thr 75 70 Leu Leu Val Asn Leu Leu Ser Ser Lys Lys Thr Ile Ile Phe Ser Gly 90 Cys Ala Val Gln Met Tyr Leu Ser Leu Ser Met Gly Ser Thr Glu Cys 105 100 Ile Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Arg Tyr Pro Ile Ile Met Asn Arg Gln Val Cys Val Gln Met 135 140 Ala Thr Ile Ser Trp Val Thr Gly Cys Leu Thr Ala Leu Leu Glu Thr 150 155 Ser Phe Ala Leu Gln Ile Pro Leu Cys Gly Asn Ile Ile Asn His Phe 165 170 Thr Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Val Ser Ser Leu 185 Leu Met Asp Leu Val Met Leu Val Val Ser Ile Leu Leu Pro Ile 200 Pro Met Leu Leu Ile Cys Ile Ser Tyr Gly Phe Ile Leu Ser Thr Ile 215 220 Leu Arg Ile Ser Ser Thr Glu Gly Arg Asn Lys Ala Phe Ser Thr Cys 230 235 Gly Ala His Leu Thr Val Val Ile Leu Tyr Tyr Gly Ala Ala Leu Ser 245 250 Met Tyr Leu Lys Pro Ser Ser Ser Asn Ser Gln Glu Ile Asp Lys Ile 265 Ile Ser Leu Leu Tyr Gly Val Leu Thr Pro Met Leu Asn Pro Ile Ile 275 280

Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Val Ile Lys Leu Leu 295 Gly Lys Val Pro Leu Ala Pro Ser Val 305 310 <210> 1506 <211> 312 <212> PRT <213> Mus musculus <400> 1506 Met Pro Asn Ser Ile Gln Leu Arg Glu Lys Arg Met Asn Val Thr Glu 10 Phe Ile Leu Met Gly Leu Thr Gln Asn Pro Gln Leu Gln Arg Ile Leu 25 Phe Phe Val Leu Leu Ile Thr Tyr Ile Ile Thr Val Thr Gly Asn Leu Leu Ile Val Gly Thr Ile Val Cys Ser Gln Ser Leu Asn Ser Pro Met 55 Tyr Phe Phe Leu Thr Phe Leu Ser Leu Ile Asp Ala Cys Tyr Ser Ser 70 75 Cys Thr Ile Pro Lys Met Leu Val Asp Leu Leu Ser Glu Thr Lys Thr 90 Ile Ser Phe Asn Gly Cys Ile Leu Gln Leu Phe Val Glu His Phe Leu 100 105 Gly Ala Ser Glu Ile Val Leu Leu Val Wet Ala Tyr Asp Arg Tyr . 115 120 125 Val Ala Ile Cys Arg Pro Leu His Tyr Ala Ser Arg Met Asn His His 135 Met Cys Cys Leu Leu Val Gly Ile Cys Trp Ile Val Gly Phe Leu His 150 155 Ser Phe Gly Gln Ile Leu Val Thr Leu Trp Ile Pro Phe Cys Gly Pro 170 Asn Ile Leu Asp His Phe Phe Cys Asp Ile Phe Pro Leu Leu Gln Leu 180 185 Ala Cys Thr Asp Thr Phe Leu Leu Gly Leu Leu Val Ala Cys Asn Gly 200 Gly Val Ile Pro Val Ile Thr Phe Thr Met Leu Leu Met Ser Tyr Ala 215 220 Val Ile Leu Tyr Ser Leu Arg Thr His Ser Thr Ala Gly Arg Lys 230 235 Ala Leu Ser Thr Cys Gly Ser His Ile Thr Val Val Val Leu Phe Phe 245 250 Val Pro Cys Ile Phe Met Tyr Met Arg Pro Val Ala Thr Phe Pro Met 265 Asp Lys Ala Ile Ala Val Phe Tyr Ile Ile Ile Thr Pro Leu Leu Asn 280 Pro Val Ile Tyr Thr Val Arg Asn Ala Glu Val Lys Ser Ala Ile Arg 295 300 Met Leu Leu Lys Arg Met His Leu 310

<210> 1507 <211> 309 <212> PRT

20

```
<400> 1507
Met Gly Asn Val Thr Val Phe Ile Leu Leu Gly Leu Ser Asp Asn Gln
                                    10
Asn Ile Glu Val Leu Cys Phe Val Leu Phe Leu Phe Cys Tyr Ile Ala
                                25
Ile Trp Met Gly Asn Val Leu Ile Met Val Ser Ile Thr Cys Thr Gln
                            40
Leu Met Asp Gln Pro Met Tyr Phe Phe Leu His Tyr Leu Ser Leu Cys
                        55
Asp Leu Cys Tyr Thr Ser Thr Val Thr Pro Lys Leu Leu Thr Asp Leu
                   70
                                       75
Leu Ala Glu Arg Lys Ile Ile Ser Tyr Asn Asn Cys Met Thr Gln Leu
                85
                                    90
Phe Val Leu His Phe Leu Gly Ala Ile Glu Ile Phe Ile Leu Thr Ala
Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu His Tyr Thr
                           120
                                               125
Val Ile Met Ser Arg Gln Arg Cys Asn Glu Ile Leu Ala Ala Cys Cys
                       135
Thr Gly Gly Phe Val His Ser Ala Ser Gln Ser Leu Leu Ile Ala Cys
                   150
                                        155
Leu Ser Phe Cys His His Asn Glu Ile Asp His Tyr Phe Cys Asp Val
               165
                                    170
                                                        175
Tyr Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr His Arg Ile Gly Leu
                               185
           180
Phe Val Ile Val Asp Ser Gly Leu Ile Ala Leu Val Thr Phe Val Val
                            200
                                                205
Leu Met Val Ser Tyr Phe Leu Ile Ala Tyr Thr Ile Ser Val Tyr Pro
                        215
Ala Glu Ser Arg Ser Lys Ala Leu Ser Thr Cys Ser Ser His Ile Thr
                    230
                                        235
Ile Val Val Leu Phe Phe Val Pro Val Phe Phe Ile Tyr Ile Arg Pro
               245
                                    250
Asn Ile Thr Phe Pro Glu Asp Lys Val Phe Ala Leu Phe Tyr Thr Ile
                                265
           260
                                                   270
Ile Ala Pro Met Phe Asn Pro Leu Ile Tyr Thr Leu Arg Asn Ile Glu
                           280
                                                285
Met Lys Arg Ala Ile Lys Lys Met Trp Tyr His Gln Ile Pro Ser Tyr
                        295
Lys Lys Gln Ile Pro
305
<210> 1508
<211> 307
<212> PRT
<213> Mus musculus
<400> 1508
Met Glu Ser Thr Asn Asn Ile Thr Glu Phe Ile Leu Leu Gly Leu Ser
                                    10
Gln Asn Lys Lys Ile Lys Ala Leu Cys Phe Leu Met Phe Leu Phe Cys
```

25 Tyr Ile Ala Ile Leu Gly Gly Asn Met Ile Ile Leu Ile Ser Ile Thr 40

```
Cys Ser Gln Leu Ile Glu Gln Pro Met Tyr Phe Phe Leu Asn Tyr Leu
Ala Leu Ser Asp Leu Cys Tyr Thr Ser Thr Val Thr Pro Lys Phe Leu
                    70
Thr Asp Leu Leu Val Glu Arg Asn Lys Ile Ser Tyr Thr Ser Cys Met
                                    90
               85
Ala Gln Leu Phe Thr Met His Phe Phe Gly Gly Ile Glu Ile Leu Ile
                               105
Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
       115
                           120
His Tyr Ser Ile Ile Met Ser Arg Gly Arg Cys His Ala Met Val Thr
                       135
                                           140
Ala Cys Cys Ala Gly Ala Phe Ile His Ser Phe Leu Gln Ser Leu Leu
                   150
                                       155
Ala Ile Ser Leu Pro Phe Cys Gly His Asn Glu Met Asp His Tyr Phe
                                    170
               165
Cys Asp Ile Tyr Pro Leu Val Thr Leu Ser Cys Thr Asn Thr His Arg
                                185
Val Gly Leu Leu Val Val Val Asn Ser Gly Met Met Gly Leu Val Thr
                            200
                                                205
Phe Val Val Leu Met Trp Ser Tyr Ser Phe Ile Leu Tyr Thr Ile Arg
                       215
Ala Tyr Pro Ala Glu Ser Arg Ser Lys Ala Leu Ser Thr Cys Ser Ser
                    230
                                        235
His Val Thr Val Val Ile Phe Phe Phe Val Pro Val Leu Phe Ile Tyr
               245
                                   250
Ile Arg Pro Ala Thr Thr Tyr Pro Glu Asp Lys Val Phe Ala Leu Phe
           260
                               265
Tyr Thr Ile Leu Ala Pro Met Phe Asn Pro Leu Ile Tyr Thr Leu Arg
                           280
Asn Thr Glu Met Lys Asn Ala Leu Arg Lys Val Trp Cys His Lys Leu
                       295
Phe Phe Ile
305
```

<210> 1509 <211> 313 <212> PRT

<213> Mus musculus

<400> 1509

Met Glu Arg Ser Leu Gln Leu Ala Asn Arg Ser Asp Asp Gln Asp Phe 10 Ile Leu Leu Gly Leu Ser Ala Ser Lys Asp Ile Lys Asp Gly Leu Phe 25 Val Ile Phe Leu Thr Leu Tyr Leu Leu Ile Phe Leu Glu Asn Met Leu Val Ile Tyr Leu Ile Ser Ser His His Glu Leu Leu His Lys Pro Met 55 Tyr Phe Phe Leu Gly Asn Leu Ser Cys Leu Glu Met Cys Tyr Val Ser 70 75 Val Thr Met Pro Thr Leu Leu Val Gly Leu Arg Ser Ser Pro Tyr His 85 90 Val Ser Phe Ser Phe Cys Met Ala Gln Leu Phe Leu Phe Met Ser Leu 105 Ile Gly Thr Lys Cys Thr Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr

```
115
                            120
                                               125
Val Ala Ile Cys Cys Pro Leu His Tyr Ser Val Ile Met Arg Pro Gln
                       135
Val Cys Trp Gly Leu Ala Leu Ser Ser Trp Val Gly Gly Leu Leu Val
                    150
                                        155
Ser Ala Ile Lys Thr Thr Cys Ile Ala Ser Leu Ser Tyr Cys Gly Pro
                                   170
               165
Asn Val Leu Asn His Phe Phe Cys Asp Val Ser Pro Leu Leu Asn Leu
           180
                               185
Ser Cys Thr His Val Ala Leu Thr Glu Leu Ile Asp Phe Ile Ser Ala
       195
                          200
Ile Ile Ile Phe Cys Gly Ser Leu Leu Val Ala Leu Ala Ser Tyr Val
                       215
                                           220
Ala Ile Gly Arg Val Leu Ile Lys Met Pro Ser Ala Ala Ala Ser His
                    230
                                        235
Lys Ala Leu Ser Thr Cys Ala Ser His Leu Leu Val Met Gly Leu Phe
                                    250
                245-
Tyr Ser Val Val Leu Phe Met Tyr Ser Arg Pro Ser His Val Lys Ser
                                265
Thr Asp Leu Asn Lys Val Leu Ser Val Ile Tyr Thr Val Ala Thr Pro
                           280
                                                285
Met Cys Ser Pro Ile Ile Tyr Cys Leu Arg Asn Arg Glu Val His Ala
                       295
Val Leu Arg Arg Thr Pro Cys Leu Cys
                    310
```

<210> 1510 <211> 314 <212> PRT

<213> Mus musculus

<400> 1510

Met Glu Lys Ser Leu Glu Leu Gly Asn Val Thr Arg Val Gln Glu Phe 10 Val Leu Leu Gly Leu Ser Thr Arg Leu Gly Ile Arg Asp Ala Leu Phe 25 Val Ile Phe Leu Thr Leu Tyr Leu Leu Thr Leu Leu Glu Asn Thr Leu 4.0 Ile Ile Tyr Leu Ile Cys Ser His Ser Glu Leu His Lys Pro Met Tyr Phe Phe Leu Gly Asn Leu Ser Cys Leu Glu Met Cys Tyr Val Ser Val 70 75 Thr Met Pro Thr Leu Leu Met Gly Leu Trp Thr Gly Pro Cys His Val Pro Phe Thr Gly Cys Met Thr Gln Leu Phe Phe Phe Ile Ser Leu Ile 100 105 Cys Thr Glu Cys Thr Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val 120 Ala Ile Cys Arg Pro Leu His Tyr Pro Leu Leu Met Arg Pro Gln Val 135 Cys Leu Gly Leu Ala Leu Ser Ser Trp Leu Gly Gly Leu Leu Val Ser 150 155 Val Ile Lys Thr Ala Cys Ile Ala Ser Leu Ser Tyr Cys Gly Pro Asn 165 170 Val Leu Asn His Phe Phe Cys Asp Val Ser Pro Leu Leu Asn Leu Ser 180 185 190

```
Cys Thr His Val Ala Leu Thr Glu Leu Val Asp Phe Ile Ser Ala Ile
                            200
Val Ile Leu Trp Gly Ser Leu Leu Val Ala Met Ala Ser Tyr Val Ala
                        215
                                            220
Ile Gly Arg Thr Val Leu Gly Met Pro Ser Ala Ala Ala Arg His Lys
                    230
                                        235
Ala Phe Ser Thr Cys Ala Ser His Leu Val Val Gly Ile Phe Tyr
                                    250
Ser Ala Thr Ile Phe Ile Tyr Ala Arg Pro Ser Arg Ile Glu Ala Met
           260
                                265
Asp Leu Asn Lys Val Leu Ser Val Ile Tyr Thr Val Val Thr Pro Met
                           280
Cys Asn Pro Val Ile Tyr Cys Leu Arg Asn Arg Glu Val Gln Ser Ala
                       295
                                            300
Phe His Arg Thr Met Arg Trp Ser Ser Val
                    310
```

<210> 1511 <211> 312 <212> PRT

<213> Mus musculus

<400> 1511

Met Glu Arg Ser Leu Ala Leu Ala Asn Met Thr Arg Val Gln Gln Phe 10 Ile Leu Leu Gly Leu Ser Thr Arg Leu Asp Ile Arg Asp Ala Leu Phe 20 25 Ala Val Phe Leu Thr Leu Tyr Leu Leu Thr Leu Glu Asn Thr Leu Ile Ile Tyr Leu Ile Cys Ser His Lys Glu Leu His Lys Pro Met Tyr Phe Phe Leu Gly Asn Leu Ser Cys Leu Glu Met Cys Tyr Val Ser Val 75 Thr Met Pro Thr Leu Leu Met Gly Leu Trp Asn Gly Leu Tyr His Ile 8.5 90 Pro Phe Ile Ala Cys Met Thr Gln Leu Phe Phe Ile Val Leu Val 105 Gly Thr Glu Cys Ile Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val 120 Ala Ile Cys Arg Pro Leu His Tyr Pro Val Leu Met Arg Pro Gln Val 135 140 Cys Leu Gly Leu Ala Met Ile Ser Trp Leu Gly Gly Leu Leu Val Ser 150 155 Met Ile Lys Thr Thr Cys Ile Ala Thr Leu Ser Tyr Cys Gly Pro Asn 165 170 Val Leu Asn His Phe Phe Cys Asp Val Ser Pro Leu Leu Asn Leu Ser 185 Cys Thr His Val Ala Leu Thr Glu Leu Val Asp Phe Ile Ser Ala Ile 200 205 Val Ile Leu Trp Gly Cys Phe Leu Thr Thr Met Ala Ser Tyr Val Ala 215 220 Ile Gly Arg Ala Val Leu Arg Met Pro Ser Thr Thr Ala Arg Tyr Lys 230 235 Ala Phe Ser Thr Cys Ala Ser His Leu Val Val Gly Ile Phe Tyr 245 250 Ser Val Thr Ile Phe Ile Tyr Ala Arg Pro Lys Arg Ile Glu Ala Met

260 265 Asp Leu Asn Lys Val Leu Ser Val Ile Tyr Thr Val Val Thr Pro Met 280 Cys Asn Pro Val Ile Tyr Cys Leu Arg Asn Lys Glu Val Gln Val Ala 295 Leu His Arg Thr Met His Trp Ser <210> 1512 <211> 312 <212> PRT <213> Mus musculus <400> 1512 Met Ala Arg Ser Leu Glu Leu Ala Asn Met Thr Arg Val Gln Lys Phe Leu Leu Gly Leu Ser Thr Arg Leu Asp Ile Arg Asp Ala Leu Phe 2.0 25 Ala Val Phe Leu Thr Leu Tyr Leu Leu Thr Leu Val Glu Asn Thr Leu 40 Ile Ile Tyr Leu Ile Phe Ser His Lys Glu Leu His Lys Pro Met Tyr 55 Phe Phe Leu Gly Asn Leu Ser Cys Leu Glu Met Cys Tyr Val Ser Val 75 Thr Met Pro Thr Leu Leu Val Gly Leu Trp Thr Gly Pro Tyr His Ile 85 90 Pro Phe Thr Leu Cys Met Thr Gln Leu Phe Phe Ile Val Leu Ile 105 Cys Thr Glu Cys Thr Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val 120 Ala Ile Cys Arg Pro Leu His Tyr Pro Leu Leu Met Arg Pro Gln Val 135 Cys Leu Gly Leu Ala Leu Ser Ser Trp Leu Gly Gly Leu Ile Val Ser 150 155 Val Ala Lys Thr Thr Cys Ile Ala Ser Leu Ser Tyr Cys Gly Pro Asn 165 170 Val Leu Asn Gln Phe Phe Cys Asp Val Ser Pro Leu Leu Asn Leu Ser 185 Cys Thr His Val Ala Leu Thr Glu Leu Val Asp Phe Ile Ser Ala Ile 200 195 205 Val Ile Phe Cys Gly Thr Leu Leu Val Ser Leu Ala Ser Tyr Ser Ala 215 220 Ile Gly Met Ala Val Leu Arg Met Pro Ser Ala Ala Ala Arg Arg Lys 230 235 Ala Phe Ser Thr Cys Ala Ser His Leu Val Val Gly Ile Phe Tyr Ser Ala Ala Leu Phe Ile Tyr Cys Arg Pro Ser Arg Ile Lys Ser Met 265 260 270 Asp Leu Asn Lys Val Leu Ser Val Ile Tyr Thr Val Val Thr Pro Leu 280 285 Cys Asn Pro Ile Ile Tyr Cys Leu Arg Asn Lys Glu Val His Thr Val 295 300 Leu Lys Lys Thr Leu His Trp Pro

310

```
<211> 309
<212> PRT
<213> Mus musculus
<400> 1513
Met Met Arg Asn Gln Thr Leu Val Thr Glu Phe Ile Leu Gln Gly Phe
                                   10
Ser Glu His Pro Gln Tyr Gln Leu Pro Leu Phe Phe Cys Phe Leu Ser
                                25
Leu Tyr Cys Val Ala Leu Thr Gly Asn Val Leu Ile Ile Leu Ala Ile
                           40
                                               45
Thr Cys Asn Pro Gly Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn
                       55
Leu Ala Thr Met Asp Ile Ile Cys Thr Ser Ser Ile Met Pro Lys Ala
                   70
                                        75
Leu Arg Gly Leu Val Ser Lys Arg Asn Pro Ile Ser Tyr Gly Gly Cys
Met Ala Gln Leu Tyr Phe Leu Thr Trp Ser Ala Ser Ser Glu Leu Leu
                               105
Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys His Pro
                           120
Leu His Tyr Ser Thr Met Met Ser Lys Ala Phe Cys Ser Met Leu Ala
                       135
                                           140
Ala Gly Val Trp Ala Leu Cys Ala Phe Asn Thr Ala Ile His Thr Gly
                  150
                                       155
Leu Met Thr Arg Leu Ser Phe Cys Gly Pro Asn Val Ile Thr His Phe
                                   170
               165
Phe Cys Glu Val Pro Pro Leu Leu Leu Ser Cys Ser Ser Thr Tyr
                                185
Val Asn Ser Val Met Ile Val Leu Ala Asp Ala Phe Tyr Gly Ile Leu
                            200
                                                205
Asn Phe Leu Met Thr Ile Val Ser Tyr Gly Phe Ile Ile Ser Ser Ile
                       215
                                            220
Leu Lys Met Arg Thr Ser Giu Gly Lys Gln Lys Ala Phe Ser Thr Cys
                   230
                                        235
Ser Ser His Leu Ile Val Val Cys Met Tyr Tyr Thr Ala Val Phe Tyr
               245
                                    250
Ala Tyr Ile Ser Pro Val Ser Ser Tyr Asn Ala Glu Lys Ser Lys Leu
                               265
Ala Gly Val Leu Tyr Thr Met Leu Ser Pro Thr Leu Asn Pro Leu Ile
                           280
                                               285
Tyr Thr Leu Arg Asn Lys Glu Val Lys Ala Ala Leu Arg Lys Phe Phe
Pro Phe Leu Arg Asn
305
<210> 1514
<211> 307
<212> PRT
<213> Mus musculus
<400> 1514
Met Asp Gly Asp Asn Glu Thr Met Val Ala Glu Phe Leu Leu Gly
```

1.0

Leu Ser Gly Lys Ser Glu Glu Glu Val Val Phe Gly Met Phe Leu

<210> 1513

```
20
                                25
Gly Met Tyr Leu Val Thr Ile Ser Gly Asn Leu Leu Ile Ile Leu Ala
Ile Ser Cys Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
Asn Leu Ser Ser Val Asp Ile Cys Phe Ser Ser Val Thr Val Pro Lys
                   70
                                        75
Ala Leu Val Asn His Val Leu Gly Ser Lys Ser Ile Ser Tyr Thr Glu
               85
                                    90
Cys Met Ile Gln Ile Tyr Phe Phe Ile Thr Phe Ile Asn Met Asp Gly
                                105
Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                            120
                                                125
Pro Leu His Tyr Thr Met Met Met Arg Ser Arg Leu Cys Val Leu Leu
                        135
Val Ala Ile Ser Trp Val Ile Thr Asn Leu His Ala Leu Leu His Thr
                    150
Leu Leu Met Val Arg Leu Thr Phe Cys Ser His Asn Ala Val His His
                165
                                    170
Phe Phe Cys Asp Pro Tyr Pro Ile Leu Lys Leu Ser Cys Ser Asp Thr
                               185
Phe Ile Asn Asp Leu Met Val Phe Thr Val Gly Gly Val Ile Phe Leu
                            200
                                                205
Thr Pro Phe Ser Cys Ile Val Val Ser Tyr Val Tyr Ile Phe Ser Lys
                       215
Val Leu Lys Ile Pro Ser Ala Arg Gly Ile Arg Lys Ala Leu Ser Thr
                    230
                                       235
Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Ala Ile Leu
                245
                                    250
Gly Val Tyr Met Arg Pro Ser Ser Ser Tyr Ser Leu Gln Asp Thr Val
            260
                                265
Ala Thr Val Ile Phe Thr Val Val Thr Pro Leu Val Asn Pro Phe Ile
                            280
Tyr Ser Leu Arg Asn Gln Asp Met Lys Gly Ala Leu Arg Lys Ile Met
   290
                       295
Leu Arg Ser
305
<210> 1515
<211> 315
<212> PRT
```

 Met
 Val
 Arg
 Glu
 Asn
 Gln
 Ser
 Thr
 Ala
 Ile
 Glu
 Phe
 Leu
 Leu
 Leu
 Gly

 Ile
 Ala
 Gly
 Gly
 Glu
 Glu
 Glu
 Val
 Ile
 Phe
 Gly
 Met
 Phe
 Leu
 Ala
 Ala
 Ala
 Ala
 Ala
 Ile
 Phe
 Ile
 Ile

<213> Mus musculus

<400> 1515

```
Cys Met Thr Gln Ile Tyr Phe Phe Ile Thr Phe Ile Asn Met Asp Gly
                               105
Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                           120
Pro Leu His Tyr Thr Met Met Arg Pro Arg Leu Cys Val Leu Leu
                       135
Val Ala Ile Ser Trp Ala Ile Thr Asn Leu His Ala Leu Leu His Thr
                   150
                                       155
Leu Leu Met Val Arg Leu Thr Phe Cys Ser His Asn Ala Met His His
               165
                                   170
Phe Phe Cys Asp Pro Tyr Pro Ile Leu Lys Leu Ser Cys Ser Asp Thr
           180
                               185
                                                   190
Phe Ile Asn Asp Ile Thr Ala Phe Thr Val Gly Gly Leu Thr Ser Ile
                           200
                                               205
Thr Pro Phe Thr Cys Ile Thr Val Ser Tyr Gly Tyr Ile Leu Ser Asn
                       215
                                            220
Val Leu Lys Phe Pro Ser Ile Gln Gly Ile Arg Lys Ala Leu Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Ala Ile Leu
               245
                                    250
Gly Val Tyr Met His Pro Ser Ser Thr Tyr Ser Val Gln Asp Met Val
                               265
Ala Thr Ala Phe Phe Thr Val Val Thr Pro Met Val Asn Pro Phe Ile
       275
                           280
                                               285
Tyr Ser Leu Arg Asn Arg Asp Val Lys Gly Ala Leu Arg Lys Leu Met
                       295
Cys Arg Arg Leu Thr Ser Ser Arg Phe Tyr Asn
                    310
```

<211> 307

<212> PRT

<213> Mus musculus

<400> 1516

Met Asp Gly Asp Asn Gln Thr Ile Val Thr Glu Phe Ile Leu Leu Gly 10 Leu Thr Arg Gln Ser Glu Lys Glu Glu Val Val Phe Gly Leu Phe Leu 25 Trp Met Tyr Leu Val Thr Ile Ser Gly Asn Leu Leu Ile Ile Leu Ala 4.0 4.5 Ile Ser Cys Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu Ala 55 Asn Leu Ser Ser Val Asp Ile Ser Ala Pro Ser Val Ile Val Pro Lys 75 70 Ala Leu Val Asn His Met Leu Gly Ser Lys Ser Ile Ser Tyr Thr Gly 90 85 Cys Met Thr Gln Ile Tyr Phe Phe Ile Thr Phe Ser Asn Met Asp Gly 105 Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 125 Pro Leu His Tyr Thr Met Met Arg Pro Arg Leu Cys Val Leu Leu 135 Val Ala Ile Ser Trp Ala Ile Thr Asn Leu His Ala Leu Leu His Thr 150 155 Leu Leu Met Val Arg Leu Thr Phe Cys Ser His Asn Ala Val His His

```
165
                                   170
Phe Phe Cys Asp Pro Tyr Pro Ile Leu Lys Leu Ser Cys Ser Asp Thr
                               185
           180
Phe Ile Asn Asp Leu Met Val Phe Thr Ile Gly Gly Leu Val Phe Met
       195
                           200
Thr Pro Phe Thr Cys Ile Ile Val Ser Tyr Ala Tyr Ile Phe Ser Lys .
                                          220
                       215
Val Leu Lys Leu Lys Ser Ala His Gly Ile Arg Lys Ala Leu Ser Thr
                  230
                                       235
Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Ala Ile Leu
              245
                               250
Gly Ile Tyr Met His Pro Ser Ser Thr Tyr Thr Val Gln Asp Thr Val
           260
                              265
Ala Thr Val Ile Phe Thr Val Val Thr Pro Met Val Asn Pro Phe Ile
                          280
Tyr Ser Leu Arg Asn Arg Asp Ile Lys Gly Ala Leu Arg Lys Ile Ile
   290
                       295
Leu Arg Ser
305
```

<210> 1517 <211> 305 <212> PRT <213> Mus musculus

<400> 1517

Met Glu Glu Ala Asn Gln Thr Val Val Ser Glu Phe Ile Phe Gln Gly															
Met 1	Glu	Glu	Ala	Asn 5	Gln	Thr	Val	Val	Ser 10	Glu	Phe	Ile	Phe	Gln 15	Gly
Leu	Cys	Ala	Ser 20	Lys	Glu	Leu	Gln	Ile 25	Leu	Leu	Leu	Leu	Pro 30	Phe	Ser
Thr	Leu	Tyr 35	Met	Met	Thr	Val	Val 40	Gly	Asn	Leu	Phe	Val 45	Val	Ile	Leu
Ile	Ile 50	Ile	Asp	His	His	Leu 55	His	Ser	Pro	Met	Tyr 60	Phe	Leu	Leu	Ala
Asn 65	Leu	Ser	Phe	Ile	Asp 70	Phe	Cys	Leu	Ser	Ser 75	Val	Thr	Thr	Pro	Lys 80
Leu	Ile	Thr	Asp	Leu 85	Leu	Lys	Asp	Asn	Lys 90	Thr	Ile	Ser	Phe	Gly 95	Gly
Cys	Met	Ser	Gln 100	Ile	Leu	Cys	Val	His 105	Phe	Phe	Gly	Gly	Gly 110	Glu	Met
Val	Leu	Leu 115	Val	Thr	Met	Ala	Tyr 120	Asp	Arg	Tyr	Val	Ala 125	Ile	Cys	Arg
Pro	Leu 130	His	Tyr	Ser	Ser	Ile 135	Met	Asp	Arg	Gln	Lys 140	Cys	Ile	Trp	Leu
Val 145	Val	Ile	Ser	Trp	Thr 150	Ile	Gly	Phe	Ile	His 155	Ala	Met	Ser	Gln	Leu 160
Ile	Leu	Ile	Leu	Asp 165	Leu	Pro	Phe	Суѕ	Gly 170	Pro	Arg	Val	Ile	Asp 175	Ser
Phe	Phe	Cys	Asp 180	Ile	Pro	Leu	Val	Met 185	Lys	Leu	Ala	Cys	Met 190	Asn	Thr
Asp	Thr	Leu 195	Gly	Ile	Val	Ile	Asn 200	Ala	Asp	Ser	Gly	Val 205	Leu	Ala	Thr
Thr	Cys 210	Phe	Ile	Leu	Leu	Leu 215	Ile	Ser	Tyr	Thr	Tyr 220	Ile	Leu	Leu	Thr
Val 225	Gln	Leu	His	Ser	Lys 230	Asp	Gly	Ser	Ser	Lys 235	Ala	Leu	Ser	Thr	Cys 240

Thr Ser His Ile Ile Val Val Leu Phe Phe Gly Pro Cys Ile Phe 250 Ile Tyr Leu Trp Pro Val Ser Ile Thr Trp Val Asp Lys Phe Leu Ala 265 260 Val Phe Tyr Thr Val Ile Thr Pro Leu Leu Asn Pro Ala Ile Tyr Thr 280 Leu Arg Asn Lys Asp Ile Lys Asn Ala Ile Lys Lys Leu Lys Asn His 295 Met 305 <210> 1518 <211> 305 <212> PRT <213> Mus musculus <400> 1518 Met Glu Asp Ser Asn Arg Thr Val Ser Ser Glu Phe Ile Phe Gln Gly 10 Leu Cys Ser Ser Arg Gln Leu Glu Ile Phe Leu Leu Pro Phe Ser 25 Ile Leu Tyr Leu Met Ala Val Val Gly Asn Leu Phe Val Val Ile Leu 40 Ile Ile Ile Asp His His Leu His Ser Pro Met Tyr Phe Leu Leu Ala 55 Asn Leu Ser Phe Ile Asp Phe Cys Leu Ser Ser Val Thr Thr Pro Lys 70 75 Leu Thr Ile Asp Leu Leu Lys Glu Asn Lys Thr Ile Ser Phe Val Gly 90 Tyr Met Arg Gln Ile Val Cys Val His Phe Phe Ala Gly Glu Met 100 105 Val Leu Leu Val Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg 120 Pro Leu His Tyr Ser Ser Ile Met Asp Arg Gln Lys Cys Ile Trp Leu 135 140 Val Val Ile Ser Trp Ile Val Gly Phe Val His Ala Ile Ser Gln Met 150 155 Leu Leu Ile Leu Asp Leu Pro Phe Cys Gly Pro Arg Val Ile Asp Ser 165 170 Phe Phe Cys Asp Ile 'Pro Leu Val Met Lys Leu Ala Cys Met Asn Thr 180 185 Asp Thr Leu Glu Ile Leu Ile Asn Ala Asp Ser Gly Ile Leu Ala Thr 200 205 Thr Trp Phe Ile Leu Leu Leu Ser Tyr Thr Tyr Ile Leu Leu Thr 215 220 Val Gln His Arg Ser Lys Asp Gly Ser Ser Lys Ala Leu Ser Thr Cys 230 235 Thr Ser His Ile Ile Val Val Leu Leu Phe Phe Gly Pro Ile Ile Phe 245 250 Ile Tyr Leu Trp Pro Val Ser Ile Thr Trp Val Asp Lys Phe Leu Ala

265 Val Phe Tyr Ser Val Ile Thr Pro Leu Leu Asn Pro Ala Ile Tyr Thr 280

Leu Arg Asn Lys Asp Ile Lys Asn Ala Ile Lys Lys Leu Ile Ser His

295

285

Lys

<400> 1520

```
<210> 1519
<211> 305
<212> PRT
<213> Mus musculus
<400> 1519
Met Glu Leu Glu Asn Gln Thr Arg Val Ile Glu Phe Phe Leu Leu Gly
                                    10
Leu Ser Glu Asp Pro Glu Leu Gln Pro Ile Leu Phe Gly Leu Phe Leu
                                25
Leu Met Tyr Leu Val Thr Val Ser Gly Asn Leu Leu Ile Ile Leu Ala
Ile Val Ser Asp Ala His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
Asn Leu Ser Phe Thr Asp Ile Cys Phe Ser Thr Thr Thr Val Pro Lys
                                        75
Met Leu Thr Asn Leu Gln Lys Gln Ser Lys Ser Ile Ser Tyr Thr Gly
               85
                                    90
Cys Ile Thr Gln Leu Ser Phe Val Leu Leu Phe Ala Gly Met Glu Asn
                               105
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
       115
                           120
Pro Leu Arg Tyr Thr Asp Ile Met Lys Leu His Leu Cys Phe Val Met
 130
                       135
                                           140
Ile Phe Leu Ser Leu Tyr Ile Ser Ile Val Asp Ala Leu Leu His Gly
                   150
                                       155
Leu Met Thr Leu Arg Leu Ser Phe Cys Thr Phe Leu Glu Ile Pro His
                165
                                    170
Phe Phe Cys Glu Leu Tyr Gln Val Ile Lys Ile Ala Cys Ser Asp Thr
                                185
Leu Ile Asn Asn Ile Leu Ile Tyr Val Met Ser Ser Ala Leu Gly Gly
                            200
                                               205
Met Pro Leu Val Gly Ile Ile Phe Ser Tyr Tyr Lys Ile Ile Ser Ser
                       215
                                            220
Ile Leu Arg Met Pro Ser Pro Gly Gly Arg His Lys Ala Phe Ser Thr
                   230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ala Phe
               245
                                    250
                                                        255
Gly Val Tyr Ile Ser Ser Ala Phe Thr Glu Ser Tyr Arg Arg Thr Ser
           260
                                265
Val Ala Ser Leu Met Tyr Thr Val Phe Pro Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Lys Ala Leu Arg Lys Ile
    290
                        295
Val
305
<210> 1520
<211> 312
<212> PRT
<213> Mus musculus
```

```
Met Glu Ser Ala Asn Gln Thr Gly Ile Ser Glu Phe Phe Leu Ile Gly
Leu Ile Tyr Val Pro Glu Leu Gln Pro Leu Phe Phe Asp Leu Phe Leu
Ser Met Tyr Leu Ile Thr Ile Ile Gly Asn Leu Leu Ile Ile Leu Ala
                            40
Val Ser Lys Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Cys
                        55
Asn Leu Ser Phe Thr Asp Ile Cys Thr Ser Thr Thr Thr Val Pro Lys
                    70
                                        75
Leu Leu Leu Asn Ile Gln Val His Asp Gln Ser Ile Thr Tyr Ile Gly
                85
                                    90
Cys Leu Ser Gln Val Cys Phe Ile Leu Thr Phe Cys Val Leu Glu Arg
            100
                                105
Cys Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Gln
                            120
Pro Leu Arg Tyr Thr Ile Ile Met Asn Pro Phe Leu Cys Ile Cys Leu
                        135
                                            140
Val Leu Leu Ser Leu Ile Ile Ser Thr Ile Asn Ala Leu Leu His Thr
                   150
                                        155
Leu Leu Val Leu Pro Leu Ser Phe Cys Thr Glu Gln Asn Val Pro Asn
                                    170
Phe Phe Cys Glu Leu Gly Gln Ile Thr Lys Leu Ser Cys Ser Asp Thr
           180
                                185
                                                    190
Phe Ile Asn Ile Leu Phe Ile Tyr Thr Ala Thr Ile Val Phe Ser Val
                            200
Ile Pro Leu Ser Gly Ile Ile Phe Ser Tyr Ile Gln Ile Val Ser Ser
                        215
                                            220
Ile Leu Lys Ile Pro Ser Val Gly Gly Arg His Lys Ala Phe Ser Thr
                   230
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Gly Leu
                245
                                    250
Gly Val Tyr Met Asn Ala Ser Val Ser Asn Ser Ser Ile Ser Asn Val
            260
                                265
Ile Thr Ser Met Met Tyr Ser Val Val Pro Gln Met Leu Asn Pro Phe
                            280
                                                285
Ile Tyr Ser Leu Arg Ser Lys Glu Ile Lys Gly Ser Leu Arg Gln Leu
                        295
Ile Ile Gly Ile Ile Cys Phe Pro
                    310
```

```
<210> 1521
```

<400> 1521

 Met
 Lys
 Pro
 Glu
 Asn
 Gln
 Thr
 Asn
 Ile
 Leu
 Glu
 Phe
 Leu
 Leu
 Leu
 Gly
 Leu
 Gly
 Leu
 Ile
 Leu
 Phe
 Phe
 Phe
 Leu
 Phe
 P

<211> 311

<212> PRT

<213> Mus musculus

```
65
                    70
                                       75
Met Leu Val Asn Ile Gln Thr Gln Ser Lys Ser Ile Ser Tyr Ala Glu
                85
                                    90
Cys Ile Thr Gln Ile Tyr Phe Phe Met Leu Phe Gly Gly Met Asp Thr
                               105
Leu Leu Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His
                           120
Pro Leu His Tyr Ser Val Ile Met Asn Pro Gln Leu Ser Gly Leu Leu
                       135
                                           140
Val Leu Val Ser Trp Phe Ile Ser Phe Ser Tyr Ser Leu Ile Gln Ser
                   150
                                       155
Leu Leu Met Leu Arg Leu Ser Phe Cys Thr Asn Gln Ile Ile Lys His
                                  170
               165
Phe Tyr Cys Glu Tyr Ala Lys Ala Leu Thr Ile Ala Cys Ser Asp Thr
           180
                               185
Leu Ile Asn His Ile Leu Leu Tyr Ile Val Ile Trp Val Leu Gly Phe
                            200
Ile Pro Phe Ser Gly Ile Leu Tyr Ser Tyr Tyr Lys Ile Phe Ser Ser
Ile Leu Arg Ile Pro Ser Thr Asp Gly Lys Tyr Lys Ala Phe Ser Thr
                   230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Gly Leu
                                   250
Ser Val Tyr Leu Ser Ser Asp Ala Thr Ser Ser Ser Gly Lys Gly Val
           260
                               265
Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Asp Ile Lys Lys Ala Leu Lys Thr Leu
                       295
                                            300
Gly Arg Ile Leu Leu Leu Lys
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1522

Met Lys Pro Glu Asn Gln Thr Asn Ile Leu Glu Phe Leu Leu Gly Phe Ser Gln Tyr Pro Glu His Gln Pro Met Leu Phe Gly Leu Phe Leu 20 25 Leu Met Phe Val Val Ala Val Phe Gly Asn Leu Leu Ile Ile Leu Ala Val Ser Ile Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 Asn Leu Ser Phe Ser Asp Ile Gly Phe Ile Ser Thr Thr Ile Pro Lys 70 75 Met Leu Val Asn Ile Gln Thr Gln Ser Lys Ser Ile Ser Tyr Ala Glu 90 Cys Ile Thr Gln Ile Tyr Phe Phe Met Leu Phe Gly Gly Met Asp Thr 100 105 Leu Leu Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His 120 125 Pro Leu His Tyr Ser Val Ile Met Asn Pro Gln Leu Ser Gly Leu Leu 130 135 140

```
Val Leu Val Ser Trp Phe Ile Ser Phe Ser Tyr Ser Leu Ile Gln Ser
                    150
                                        155
Leu Leu Met Leu Arg Leu Ser Phe Cys Thr Asn Gln Ile Ile Lys His
                165
                                    170
                                                        175
Phe Tyr Cys Glu Tyr Ser Arg Ala Leu Thr Ile Ala Cys Ser Asp Thr
                               185
Leu Ile Asn His Ile Leu Leu Tyr Ile Leu Ile Cys Val Leu Gly Phe
                           200
Ile Pro Phe Ser Gly Ile Leu Tyr Ser Tyr Cys Lys Ile Val Ser Ser
                       215
                                           220
Ile Leu Arg Ile Pro Ser Thr Asp Gly Lys Tyr Lys Ala Phe Ser Thr
                   230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Gly Leu
               245
                                    250
Gly Val Tyr Leu Ser Ser Asp Val Thr Ser Ser Ser Gly Lys Asp Val
                                265
            260
Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Ile Lys Lys Ala Leu Lys Thr Leu
                       295
Gly Arg Ile Leu Leu Leu Lys
```

<210> 1523 <211> 311 <212> PRT

<213> Mus musculus

<400> 1523

Met Gln Asn Gln Ser Leu Val Asn Glu Phe Ile Leu Leu Gly Leu Ser 1 10 Gln Asn Thr Lys Val Glu Lys Ile Leu Phe Leu Leu Phe Leu Leu Ile 20 25 Tyr Leu Ala Thr Ile Gly Gly Asn Met Ile Ile Val Ala Thr Ile Ile 40 Tyr Ser Pro Ala Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Val Phe 5.5 Leu Ser Leu Leu Asp Ala Cys Thr Ser Thr Val Val Thr Pro Lys Met 70 75 Ile Val Gly Phe Phe Tyr Glu Arg Lys Ile Ile Ser Phe Glu Gly Cys 8.5 90 Met Thr Gln Leu Phe Ala Ile His Phe Phe Thr Ala Val Glu Val Ile 105 Val Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro 120 Leu His Tyr Leu Ser Ile Met Ser Lys Arg Val Cys Gly Val Leu Val 135 140 Gly Ile Ala Trp Ala Gly Gly Phe Leu His Ser Ile Ile Gln Ile Val 150 155 Phe Thr Leu Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr 165 170 Met Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr Gln 180 185 190 Ile Phe Val Ile Leu Val Phe Ala Asn Ser Gly Ser Ile Cys Ile Ile 200 Ile Phe Ser Leu Leu Val Ser Tyr Gly Val Ile Leu Phe Ser Leu

```
210
                        215
                                            220
Arg Ala His Ser Ser Glu Gly Arg Tyr Lys Ala Leu Ser Thr Cys Gly
                    230
                                        235
Ser His Ile Thr Val Val Leu Phe Phe Val Pro Cys Ile Leu Ile
                                    250
Tyr Ala Arg Pro Ser Ser Pro Phe Ser Phe Glu Lys Asn Thr Leu Ile
           260
                               265
Phe Ala Asn Val Leu Thr Pro Leu Leu Asn Pro Met Val Tyr Thr Phe
                           280
                                                285
Arg Asn Lys Glu Met Lys Ser Ala Ile Arg Lys Met Trp Lys Arg Leu
                       295
                                            300
Val Val Val Ser Asp Lys Tyr
<210> 1524
<211> 304
<212> PRT
<213> Mus musculus
<400> 1524
Met Gln Asn Gln Ser Phe Val Thr Glu Phe Ile Leu Leu Gly Leu Ser
Gln Asn Leu Asn Val Glu Lys Met Leu Phe Val Leu Phe Leu Phe Ile
                                25
Tyr Ile Ala Thr Ile Gly Gly Asn Met Met Ile Val Val Thr Ile Ile
                            40
Tyr Ser Pro Ala Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Phe
                        55
                                            60
Leu Ser Phe Leu Asp Ala Cys Thr Ser Ser Thr Val Thr Pro Lys Ile
                                        75
Ile Val Asp Cys Phe Tyr Glu Arg Lys Thr Ile Ser Phe Glu Cys Cys
                                    90
Met Thr Gln Leu Phe Thr Val His Phe Phe Thr Gly Ala Glu Val Ile
            100
                                105
Val Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                            120
                                               125
Leu His Tyr Ser Ser Ile Met Thr Gln Arg Leu Cys Gly Ile Leu Val
                       135
                                            140
Val Val Ser Trp Ala Gly Gly Phe Leu His Ser Ile Ile Gln Ile Ile
                   150
                                        155
Phe Thr Leu Gln Leu Pro Leu Cys Gly Pro Asn Val Ile Asp His Tyr
               165
                                    170
                                                        175
Met Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr His
                               185
Ile Tyr Val Leu Ile Phe Ala Asn Ser Gly Ala Ile Cys Ile Ile
        195
                            200
Ile Phe Ser Leu Leu Ile Val Ser Tyr Gly Val Ile Leu Phe Ser Leu
                        215
                                            220
Arg Ala Gln Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly
                   230
                                        235
Ser His Ile Thr Val Val Leu Leu Phe Phe Val Pro Cys Ile Leu Ile
                245
                                    250
Tyr Ala Arg Pro Thr Ser Ala Phe Ser Phe Glu Lys Asn Met Leu Ile
                               265
```

Phe Val Asn Val Leu Thr Pro Leu Leu Asn Pro Met Val Tyr Thr Phe

285

280

275

```
<210> 1525
<211> 311
<212> PRT
<213> Mus musculus
<400> 1525
Met Glu Asn Gln Ser Ile Val Asn Glu Phe Ile Leu Leu Gly Leu Ser
                                    10
Gln Asn Pro Lys Ile Glu Asn Ile Leu Phe Val Val Phe Leu Leu Val
          20
                                25
Tyr Leu Ala Thr Ile Gly Gly Asn Met Met Ile Ile Ala Thr Ile Ile
                            40
Tyr Ser Pro Ala Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Ile Phe
                        5.5
Leu Ser Leu Leu Asp Thr Cys Thr Ser Thr Val Val Thr Pro Lys Leu
                    70
                                        75
Ile Leu Asp Phe Phe Tyr Glu Arg Lys Thr Ile Ser Phe Glu Gly Cys
                                    90
Met Thr Gln Leu Phe Ala Phe His Phe Phe Thr Gly Ala Glu Val Ile
           100
                               105
Val Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                           120
Leu His Tyr Ser Ser Ile Met Thr Trp Arg Leu Cys Gly Val Leu Val
                       135
                                           140
Gly Val Ala Trp Thr Gly Gly Phe Leu His Ser Ile Ile Gln Ile Ile
                   150
                                       155
Phe Thr Leu Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asp Asn Tyr
                165
                                    170
Ile Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr His
           180
                                185
Ile Phe Val Phe Leu Val Phe Ala Asn Ser Gly Ser Ile Cys Ile Ile
                           200
                                                205
Ile Phe Ser Leu Leu Val Ser Tyr Gly Val Ile Leu Phe Ser Leu
                      215
                                            220
Arg Gly His Ser Ser Glu Gly Arg Leu Lys Ala Leu Ser Thr Cys Gly
                    230
                                        235
Ser His Ile Thr Val Val Val Leu Phe Phe Val Pro Cys Ile Leu Ile
                245
                                    250
Tyr Ala Arg Thr Thr Ser Pro Phe Pro Tyr Glu Lys Tyr Val Ala Ile
                                265
Phe Val Asn Val Ile Thr Pro Leu Leu Asn Pro Met Val Tyr Thr Phe
                            280
                                                285
Arg Asn Lys Glu Met Lys Asn Ala Ile Arg Lys Met Cys Arg Arg Ser
Lys Val Val Ser Asp Asn Tyr
305
                    310
```

<210> 1526 <211> 311

<212> PRT

<213> Mus musculus

```
<400> 1526
Met Gln Asn Gln Ser Phe Val Thr Glu Phe Ile Leu Leu Gly Leu Ser
Gln Asn Leu Tyr Val Glu Lys Ile Leu Phe Val Leu Phe Leu Leu Ile
                                25
Tyr Leu Ala Thr Ile Gly Gly Asn Met Ile Ile Val Val Thr Ile Ile
                           40
Tyr Ser Pro Ala Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Ile Phe
                       55
Leu Ser Leu Leu Asp Ala Leu Thr Ser Ser Thr Val Thr Pro Lys Ile
                   70
                                        75
Ile Val Asp Cys Phe Tyr Glu Arg Lys Thr Ile Ser Phe Glu Cys Cys
               85
                                   90
Met Thr Gln Leu Phe Thr Val His Phe Phe Thr Gly Ala Glu Val Ile
                               105
Val Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                            120
Leu His Tyr Ser Ser Ile Met Thr Arg Arg Leu Cys Gly Ile Leu Val
                       135
                                            140
Val Val Ser Trp Ala Gly Gly Phe Leu His Ser Ile Ile Gln Ile Ile
                  150
                                       155
Phe Thr Leu Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr
               165
                                   170
Met Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr His
           180
                               185
Ile Tyr Val Leu Leu Ile Phe Ala Asn Ser Gly Ala Ile Cys Ile Ile
       195
                           200
Ile Phe Ser Leu Leu Val Ser Tyr Gly Ile Ile Leu Phe Ser Leu
                       215
                                           220
Arg Ala His Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly
                    230
                                        235
Ser His Ile Ile Val Val Leu Leu Cys Phe Val Pro Cys Leu Leu Ile
                245
                                    250
Tyr Ala Arg Pro Thr Ser Ala Phe Ser Phe Glu Lys Asn Met Leu Ile
                               265
Phe Ile Asn Val Leu Thr Pro Leu Leu Asn Pro Met Val Tyr Thr Phe
                           280
Arg Asn Lys Glu Met Lys Asn Ala Ile Arg Lys Met Trp Lys Arg Leu
                       295
                                            300
Ile Val Val Ser Asp Lys Phe
<210> 1527
<211> 311
<212> PRT
<213> Mus musculus
```

```
Leu Ser Phe Leu Asp Ala Cys Ile Ser Ser Val Ile Thr Pro Lys Val
                                        75
Thr Val Asp Leu Leu Tyr Glu Lys Arg Thr Ile Ser Phe Glu Gly Cys
Met Ala Gln Val Phe Ala Val His Phe Phe Thr Gly Val Glu Val Ile
                                105
           100
Val Leu Ile Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                           120
Leu Tyr Tyr Ser Ser Ile Met Asn Arg Arg Leu Cys Gly Ile Leu Met
                       135
Gly Met Ala Trp Thr Gly Gly Phe Leu His Ser Thr Ile Gln Ile Ile
                   150
                                        155
Phe Ile Leu Cys Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe
               165
                                   170
Leu Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr His
            180
                                185
Ile Phe Val Ile Leu Val Phe Ala Asn Ser Gly Ser Phe Cys Ile Ile
                            200
Ile Phe Ser Leu Leu Ile Ser Tyr Gly Val Ile Leu Phe Ser Leu
                       215
                                            220
Arg Thr His Ser Thr Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly
                   230
                                       235
Ser His Ile Thr Val Val Val Leu Phe Phe Val Pro Cys Ile Ile Ile
               245
                                    250
Tyr Ala Arg Pro Thr Ser Ala Phe Phe Ser Glu Lys Asn Met Phe Leu
           260
                                265
Phe Ala Thr Ile Leu Thr Pro Leu Leu Asn Pro Met Ile Tyr Thr Phe
       275
                           280
                                               285
Arg Asn Lys Glu Met Lys Asn Ala Ile Arg Lys Ile Trp Lys Lys Leu
Ile Leu Asp Tyr Gly Ile Ser
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1528

Met His Asn Gln Ser Tyr Val Asn Glu Phe Ile Leu Leu Gly Leu Ser 10 Gln Asn Pro Gln Ile Glu Lys Ile Ser Phe Phe Ile Phe Leu Leu Val Tyr Leu Ala Thr Leu Val Gly Asn Met Ile Ile Val Val Thr Ile Val Tyr Ser Pro Ala Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Phe 55 Leu Ser Phe Leu Asp Ala Cys Val Ser Ser Val Val Thr Pro Lys Met 70 75 Ile Ala Asp Met Thr Tyr Glu Arg Lys Ile Ile Ser Phe Glu Cys Cys 85 90 Met Thr Gln Val Phe Ala Val His Phe Leu Thr Ala Val Glu Val Ile 105 Val Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro 120 125 Leu His Tyr Ser Phe Ile Met Asn Arg Arg Leu Cys Gly Thr Leu Val

```
130
                       135
Gly Val Ala Trp Ala Gly Gly Phe Leu His Ser Ile Ile Gln Ile Ala
                   150
                                       155
Phe Thr Leu Lys Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe
                165
                                    170
Ile Cys Asp Leu Phe Pro Leu Lys Leu Ala Cys Thr Asp Ile His
                               185
Ile Phe Ile Ile Leu Val Phe Ala Asn Ser Gly Ser Ile Cys Ile Ile
                           200
Ile Phe Ser Phe Leu Leu Ile Ser Tyr Gly Val Ile Leu Phe Ser Leu
                       215
                                           220
Arg Ala His Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly
                   230
                                        235
Ser His Ile Thr Val Val Val Phe Phe Phe Val Pro Cys Ile Leu Ile
                                   250
                245
Tyr Ala Arg Pro Thr Ser Ala Phe Ser Phe Glu Lys Asn Val Phe Val
            260
                               265
Phe Thr Asp Val Leu Thr Pro Leu Leu Asn Pro Met Val Tyr Thr Phe
                            280
Arg Asn Lys Glu Met Ile Asn Ala Ile Gly Lys Met Arg Lys Arg Leu
                        295
Ile Met Val Pro Asp Lys Tyr
```

<211> 307

<212> PRT

<213> Mus musculus

<400> 1529

Met Gln Gln Asn Ser Thr Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Gln Asp Pro Leu Lys Gln Lys Met Val Phe Ile Ile Phe Leu Val Phe 25 Tyr Met Gly Thr Val Val Gly Asn Thr Leu Ile Ile Val Thr Ile Lys 40 Phe Ser Arg Thr Leu Gly Gly Pro Met Tyr Phe Phe Leu Phe Tyr Leu 55 Ser Phe Ala Asp Ser Cys Phe Ser Thr Ser Thr Ala Pro Arg Leu Ile 70 75 Val Asp Ala Leu Ser Lys Lys Asn Ile Ile Ser Tyr Asn Glu Cys Met 8.5 90 Thr Gln Val Phe Ala Leu His Leu Phe Gly Cys Met Glu Val Phe Val 105 Leu Ile Phe Met Ala Val Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 His Tyr Pro Val Ile Met Arg Arg Gln Val Cys Val Ile Leu Ile Ile 135 140 Val Ala Trp Ile Gly Ser Phe Leu His Ser Thr Thr Gln Ile Val Leu 150 155 Ala Leu Arg Leu Pro Phe Cys Gly Pro Asn Leu Ile Asp His Tyr Cys 165 170 Cys Asp Leu Gln Pro Leu Leu Glu Leu Ala Cys Met Asp Thr His Met 185 190 Ile Asn Leu Leu Val Phe Asn Ser Gly Ala Ile Cys Ser Ser Ser 195 200 205

Phe Leu Ile Phe Ile Ile Ser Tyr Phe Val Ile Leu Tyr Ser Leu Arg 215 Asn His Ser Ala Glu Gly Arg Lys Lys Ala Leu Ser Thr Cys Thr Ser 235 230 His Ile Ile Val Val Leu Ser Phe Gly Pro Cys Ile Phe Ile Tyr 250 245 Ala Arg Pro Pro Thr Thr Phe Ser Met Asp Lys Met Val Thr Val Phe 265 Phe Thr Ile Gly Ser Pro Phe Leu Asn Pro Ile Ile Tyr Thr Leu Arg 275 280 Asn Ala Glu Val Lys Asn Ala Met Lys Lys Leu Trp His Val Lys Ile 295 Met Thr Glu 305

<210> 1530 <211> 307 <212> PRT <213> Mus musculus

<400> 1530

Met Gln Gln Asn Ser Thr Val Thr Glu Phe Ile Leu Leu Gly Leu Thr 10 Gln Asp Pro Leu Lys Gln Lys Met Val Phe Ile Ile Phe Leu Val Phe 25 Tyr Leu Gly Thr Val Val Gly Asn Thr Leu Ile Ile Val Thr Ile Lys 40 45 Phe Ser Arg Thr Leu Gly Ser Pro Met Tyr Phe Phe Leu Phe Tyr Leu Ser Phe Ser Asp Ser Cys Phe Ser Thr Ser Thr Ala Pro Arg Leu Ile 75 Val Asp Ala Leu Ser Lys Lys Asn Ile Ile Ser Tyr Asn Glu Cys Met Thr Gln Val Phe Ala Leu His Leu Phe Gly Cys Met Asp Val Phe Ile 105 Leu Ile Phe Met Ala Val Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 Arg Tyr Ser Val Ile Met Arg Arg Gln Val Cys Val Ile Leu Ile Ile 135 140 Val Ala Trp Ile Gly Ser Phe Leu His Ser Thr Thr Gln Ile Val Leu 150 155 Ala Leu Arg Leu Pro Phe Cys Gly Pro Asn Leu Ile Asp His Tyr Cys 170 Cys Asp Leu Gln Pro Leu Leu Lys Leu Ala Cys Met Asp Thr Tyr Met 190 185 Ile Asn Leu Leu Val Phe Asn Ser Gly Ala Ile Cys Ser Ser Ser 200 Phe Val Ile Leu Ile Ile Ser Tyr Phe Val Ile Leu His Ser Leu Arg 215 220 Asn His Ser Ala Glu Gly Arg Lys Lys Ala Leu Ser Thr Cys Thr Ser 230 235 His Ile Ile Val Val Ile Leu Ser Phe Val Pro Cys Ile Phe Ile Tyr 250 245 Ala Arg Pro Pro Thr Thr Phe Pro Met Asp Lys Met Val Thr Val Phe 265 Tyr Thr Ile Gly Thr Pro Phe Leu Asn Pro Ile Ile Tyr Thr Leu Arg

275 280 285 Asn Ala Glu Val Lys Asn Ala Met Lys Lys Leu Trp His Val Lys Phe 300 295 Ile Met Lys 305 <210> 1531 <211> 307 <212> PRT <213> Mus musculus <400> 1531 Met Gln His Asn Ser Thr Val Thr Lys Phe Ile Leu Leu Gly Leu Thr Gln Asp Pro Leu Lys Gln Lys Met Val Phe Ile Ile Phe Leu Val Phe 25 Tyr Leu Gly Thr Val Val Gly Asn Thr Leu Ile Ile Met Thr Ile Lys Phe Ser Arg Thr Leu Gly Ser Pro Met Tyr Phe Phe Leu Phe Tyr Leu 55 Ser Phe Ala Asp Ser Cys Phe Ser Thr Ser Thr Ala Pro Arg Leu Ile 75 Val Asp Ala Leu Ser Lys Lys Asn Ile Ile Ser Tyr Asn Glu Cys Met 90 Thr Gln Val Phe Ala Leu His Leu Phe Gly Cys Met Glu Ile Phe Val 100 105 110 Leu Ile Leu Met Ala Val Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 Arg Tyr Pro Val Ile Met Ser Arg Gln Val Cys Val Ile Leu Ile Ile 135 140 Leu Ala Trp Ile Gly Ser Phe Ile His Ser Thr Ala Gln Ile Val Leu 150 155 Ala Leu Arg Leu Pro Phe Cys Gly Pro Asn Leu Ile Asp His Tyr Cys 165 170 175 Cys Asp Leu Gln Pro Leu Leu Lys Leu Ala Cys Met Asp Thr Tyr Met 185 Ile Asn Leu Leu Val Ser Asn Ser Gly Ala Ile Cys Ser Ser Ser 195 200 205 Phe Val Ile Leu Ile Ile Ser Tyr Phe Val Ile Leu His Ser Leu Arg 215 220 Asn His Ser Ala Glu Gly Arg Lys Lys Ala Leu Ser Thr Cys Thr Ser 230 235 His Ile Ile Val Val Ile Leu Phe Phe Gly Pro Cys Ile Phe Ile Tyr 245 250 Ala Arg Pro Pro Thr Thr Phe Ser Met Asp Lys Met Val Ala Val Phe 265 Tyr Thr Ile Gly Thr Pro Phe Leu Asn Pro Ile Ile Tyr Thr Leu Arg 280 285 Asn Ala Glu Val Lys Asn Ala Met Lys Lys Leu Trp His Val Lys Ile Met Asn Glu 305

<210> 1532 <211> 311

<400> 1532 Met Gln Asn Gln Ser Ser Val Thr Glu Phe Ile Ile Leu Gly Leu Ser 10 Gln Asn Pro Lys Ile Glu Lys Ile Leu Phe Val Val Phe Leu Leu Val 25 Tyr Met Ala Thr Val Gly Gly Asn Met Ile Ile Val Val Thr Ile Ile 40 Tyr Ser Pro Ala Leu Leu Ser Ser Pro Met Tyr Phe Phe Leu Ala Phe Leu Ser Phe Leu Asp Ala Cys Val Ser Ser Thr Val Thr Pro Lys Met 70 75 Val Val Asp Phe Leu His Glu Lys Lys Thr Ile Ser Phe Gly Cys Cys Met Thr Gln Leu Phe Ser Val His Phe Phe Ser Gly Ala Glu Met Ile 100 105 Val Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro 120 Leu His Tyr Ser Ser Ile Leu Thr Arg Arg Leu Cys Ser Ile Leu Val 135 140 Ala Ile Ser Trp Ala Gly Gly Phe Leu His Ala Ile Val Gln Val Ile 150 155 Phe Arg Leu Gln Leu Pro Leu Cys Gly Pro Asn Val Ile Asp His Tyr 165 170 Met Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr His 180 185 190 Ile Phe Val Leu Leu Val Phe Ala Asn Ser Gly Ala Ile Cys Ile Ile 200 Ile Phe Ser Leu Leu Val Ser Tyr Gly Val Ile Leu Phe Ser Leu 215 Arg Ala His Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly 235 Ala His Val Thr Val Val Val Leu Phe Leu Val Pro Cys Ile Leu Ile 245 250 Tyr Ala Arg Asp Thr Ser Ala Phe Ser Tyr Glu Lys Asp Thr Leu Ile 265 Phe Val Asn Val Leu Thr Pro Leu Leu Asn Pro Met Val Tyr Thr Phe 280 Arg Asn Lys Glu Met Ile Asn Ala Ile Arg Lys Met Trp Lys Arg Leu 295 Ile Val Ile Phe Val Arg Tyr 305 310

<210> 1533 <211> 311

<212> PRT

<213> Mus musculus

<400> 1533

Met Leu Asn Gln Ser Phe Val Thr Glu Phe Ile Leu Leu Gly Leu Ser 1 $$ 5 $$ 5 $$ 10 $$ 10 $$ 15 $$ 6ln Asn Pro Lys Val Glu Lys Ile Leu Phe Val Leu Phe Phe Leu Val 20 $$ 25 $$ 30 $$ Tyr Leu Ala Thr Ile Gly Gly Asn Ile Val Ile Val Val Thr Ile Leu

```
Phe Ser Pro Ala Leu Phe Gly Ser Pro Met Tyr Phe Phe Leu Ser Phe
                        55
Leu Ser Phe Leu Asp Ala Cys Ile Ser Ser Val Ile Thr Pro Lys Met
Ile Val Asp Phe Phe Tyr Glu Thr Lys Thr Ile Ser Phe Glu Cys Cys
                                    90
               85
Met Val Gln Leu Phe Ala Val His Phe Phe Thr Gly Val Glu Val Ile
                                105
Val Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                            120
Leu His Tyr Ser Ser Ile Met Asn Gln Arg Leu Cys Val Ile Leu Val
                       135
                                            140
Gly Ile Ala Trp Ala Gly Gly Phe Leu His Ser Ile Thr Gln Ile Ile
                   150
                                        155
Phe Thr Leu Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Glu His Phe
                165
                                    170
Ile Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asn Thr His
                                185
Ile Phe Val Ile Leu Val Phe Ala Asn Ser Gly Ser Ile Cys Ile Ile
                            200
                                                205
Ile Phe Ser Leu Leu Val Ser Tyr Gly Val Ile Leu Phe Ser Leu
                        215
                                            220
Arg Ser His Ser Ser Glu Gly Trp Ser Lys Ala Leu Ser Thr Cys Gly
                    230
                                        235
Ser His Ile Thr Val Val Leu Leu Phe Phe Val Pro Cys Ile Leu Ile
                245
                                    250
Tyr Ala Arg Asn Thr Ser Ala Phe Ser Phe Glu Lys Asn Val Phe Ile
           260
                                265
Phe Ala Asp Val Leu Thr Pro Leu Leu Asn Pro Met Val Tyr Thr Phe
                            280
Arg Asn Lys Glu Met Lys Asn Ala Ile Lys Lys Ile Trp Arg Arg Leu
                        295
Phe Asn Ile Ser Asp Lys His
305
                    310
<210> 1534
<211> 311
<212> PRT
<213> Mus musculus
<400> 1534
Met Asn Asn Gln Ser Cys Val Thr Glu Phe Ile Phe Leu Gly Leu Ser
Gln Asn Ser Lys Val Glu Lys Ile Leu Phe Phe Ile Phe Leu Leu Ile
Tyr Leu Ala Thr Ile Gly Gly Asn Met Ile Ile Val Val Thr Ile Ile
                            40
Tyr Ser Pro Ala Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Ile Phe
                       55
Leu Ser Leu Leu Asp Ala Cys Thr Ser Ser Thr Val Thr Pro Lys Met
                    70
                                        75
Ile Val Asp Phe Phe Tyr Asp Arg Lys Thr Ile Ser Phe Glu Cys Cys
               85
                                    90
Met Thr Gln Leu Phe Ala Val His Phe Phe Thr Gly Met Glu Val Ile
```

105

110

40

35

100

```
Val Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
Leu His Tyr Ser Ser Ile Met Asn Arg Arg Leu Cys Gly Asn Leu Val
                       135
                                            140
Met Val Ser Trp Ala Gly Gly Phe Leu His Ser Ile Ile Gln Ile Ile
                                        155
                   150
Phe Met Leu Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr
                                   170
Met Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr Tyr
           180
                               185
Ile Phe Val Ile Leu Val Phe Ala Asn Ser Gly Ser Ile Cys Ile Ile
       195
                            200
                                                205
Ile Phe Ser Ile Leu Leu Val Ser Tyr Gly Val Ile Leu Tyr Ser Leu
                       215
                                           220
Lys Ala His Ser Ser Glu Gly Lys Phe Lys Ala Leu Ser Thr Cys Gly
                    230
                                        235
Ser His Ile Ile Val Val Val Leu Phe Phe Val Pro Cys Ile Leu Thr
                245
                                    250
Tyr Ala Arg Pro Ile Ser Ala Phe Ser Phe Glu Lys Asn Ala Val Val
           260
                                265
Phe Thr Thr Val Leu Thr Pro Leu Leu Asn Ser Val Val Tyr Thr Phe
                           280
Arg Asn Lys Glu Met Lys Asn Ala Ile Arg Lys Met Trp Lys Lys Leu
                       295
                                            300
Ile Ala Val Ser Asp Lys His
```

<211> 319

<212> PRT

<213> Mus musculus

<400> 1535

Met Thr Ala Arg Asn Met Thr Thr Met Ser Gly Phe Leu Leu Met Gly 5 10 Phe Ser Asp Asn His Glu Leu Gln Ile Leu Gln Ala Leu Leu Phe Leu 25 Leu Thr Tyr Leu Leu Gly Ser Ala Gly Asn Phe Ile Ile Thr Ile 40 Thr Thr Leu Asp Pro Gln Leu Gln Ser Pro Met Tyr Tyr Phe Leu Lys 55 60 Gln Leu Ser Thr Leu Asp Leu Ser Ser Leu Ser Val Thr Val Pro Gln 70 75 Tyr Val Ala Ser Ser Leu Ala Arg Ser Gly Tyr Ile Ser Tyr Gly Gln 85 90 Cys Met Leu Gln Ile Phe Phe Phe Thr Gly Leu Ala Trp Ser Glu Met 100 105 Ala Thr Leu Thr Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Leu 120 125 Pro Leu His Tyr Glu Val Ile Met Ser Pro Arg Lys Cys Thr Trp Ala 135 140 Val Ala Ala Val Trp Leu Ser Gly Gly Ile Ser Gly Thr Leu Phe Thr 155 150 Ala Ser Thr Leu Ser Ile Arg Phe Cys Gly Asp Lys Ile Ile His Gln 170 165 Phe Phe Cys Asp Ile Pro Gln Leu Leu Lys Leu Ser Cys Ser Asn Asp

180 185 Tyr Phe Gly Val Leu Glu Val Ser Thr Phe Met Ser Val Met Ala Phe 200 205 Ala Cys Phe Val Gly Ile Ala Phe Ser Tyr Gly Gln Ile Phe Ser Thr 210 215 Val Leu Arg Met Pro Ser Ala Glu Gly Arg Ser Lys Val Phe Ser Thr 230 235 Cys Leu Pro His Leu Phe Val Val Ser Phe Phe Leu Ser Thr Gly Ile 245 250 Cys Ala Tyr Leu Lys Pro Thr Ser Asp Ser Pro Thr Ala Leu Asp Leu 260 265 Met Leu Ser Ile Phe Tyr Thr Leu Leu Pro Pro Thr Leu Asn Pro Val 280 Ile Tyr Ser Leu Arg Asn Glu Ser Leu Lys Arg Ala Leu Lys Lys Leu 295 300 Leu Leu Ser Glu Glu Phe Ile Arg Lys Lys Cys Leu Phe Tyr Phe 310

<210> 1536

<211> 315

<212> PRT

<213> Mus musculus

<400> 1536

Met Ser Lys Met Asp Gly Gly Asn His Ser Leu Val Ser Glu Phe Val Leu Leu Gly Leu Ala His Ser Gln Asn Ile Gln Ala Leu Leu Phe Met 20 25 Ile Phe Leu Met Leu Tyr Leu Leu Ile Val Ser Gly Asn Ile Val Ile 40 Met Val Leu Ile Thr Thr Asp Pro His Leu His Ser Pro Met Tyr Phe 55 Leu Leu Ala Asn Leu Ser Phe Val Asp Met Trp Leu Ser Ser Val Thr 70 75 Thr Pro Lys Met Ile Thr Asp Phe Phe Arg Glu Asn Lys Thr Ile Ser 8.5 90 Phe Ser Gly Cys Met Ser Gln Val Phe Phe Ala His Cys Ile Ala Ala 100 105 Gly Glu Met Val Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala 115 120 Ile Cys Lys Pro Leu His Tyr Phe Thr Ile Met Asn Leu Lys Arg Cys 140 135 Thr Gly Leu Val Leu Thr Ser Trp Thr Ile Gly Phe Val His Ala Leu 150 155 Ser His Leu Val Val Ile Val Glu Leu Pro Phe Cys Ser Ala Lys Glu 165 170 Ile Asp Ser Phe Phe Cys Asp Met Pro Leu Val Ile Lys Leu Ala Cys 185 Met Asp Ser His Asn Leu Asp Ile Leu Met Tyr Ala Asp Cys Gly Val 200 205 Val Gly Val Thr Cys Phe Ile Leu Leu Ile Ser Tyr Thr Tyr Ile 215 220 Leu Ile Thr Val Arg Arg Ser Ser Lys Ala Gly Ala Ser Lys Ala Leu 230 235 Ser Thr Cys Thr Ala His Ile Thr Val Val Met Ile Phe Phe Val Pro 245 250

 Cys
 Ile
 Phe
 Ile
 Tyr
 Val
 Trp
 Pro
 Leu
 Asn
 Ile
 Thr
 Trp
 Leu
 Asp
 Lys

 260
 260
 265
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 270
 280
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 285
 280
 285
 280
 285
 280
 2

<210> 1537 <211> 312 <212> PRT <213> Mus musculus

<400> 1537 Met Asp Gly Asp Asn Gln Thr Val Val Ser Glu Phe Val Leu Leu Gly Leu Ser Asn Ser Lys Asn Leu Gln Val Leu Leu Phe Leu Ile Phe Leu 25 Leu Leu Tyr Leu Leu Ile Met Ser Gly Asn Ile Val Ile Gln Ile Leu 40 Ile Thr Thr Asp Pro His Leu His Ser Pro Met Tyr Phe Leu Leu Ala 55 Asn Leu Ser Phe Val Asp Met Leu Leu Ser Ser Asn Thr Thr Pro Arg 70 75 Met Ile Ile Asp Phe Phe Arg Glu Lys Lys Thr Ile Ser Phe Ala Gly 85 90 Cys Met Ser Gln Ile Phe Phe Ser His Cys Ile Ala Ser Gly Glu Val 100 105 Val Leu Leu Ala Leu Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys 120 Pro Leu His Tyr Phe Thr Ile Met Asn Leu Lys Arg Cys Thr Gly Leu 135 140 Val Leu Thr Ser Trp Thr Ile Gly Phe Leu His Gly Ile Ser His Val 150 155 Val Val Leu Leu Gln Leu Pro Phe Cys Gly Pro Asn Lys Ile Asp Ser 170 Phe Phe Cys Asp Met Pro Leu Val Ile Lys Leu Ala Cys Met Asp Ser 185 180 Gln Asp Leu Asn Thr Leu Met Asn Gly Glu Cys Gly Ile Leu Ala Val 200 Thr Cys Phe Ile Leu Leu Ile Ser Tyr Thr Tyr Ile Leu Ile Thr 215 220 Val His Gln Asn Ser Lys Thr Gly Ala Ser Lys Ala Leu Ser Thr Cys 230 235 Thr Ala His Ile Thr Val Val Met Ile Phe Phe Leu Pro Cys Phe Phe 245 250 Ile Tyr Val Phe Pro Leu Asn Ile Thr Trp Leu Asp Lys Phe Leu Ala 265 Val Phe Tyr Ser Val Ile Thr Pro Leu Leu Asn Pro Val Ile Tyr Thr 280 Leu Arg Asn Lys Glu Met Lys Asn Ala Met Lys Arg Phe Ile Gly Lys 295 300 Phe Leu Arg Ala Lys Gly Asn Ser 305 310

```
<211> 312
<212> PRT
<213> Mus musculus
<400> 1538
Met Asp Gly Ser Asn Arg Ser Leu Val Ser Glu Phe Val Leu Leu Gly
                                    10
Leu Ala Arg Ser Gln Asn Leu Gln Val Leu Leu Phe Ile Ile Phe Leu
           20
                                25
Val Val Tyr Leu Leu Ile Leu Ser Gly Asn Thr Ile Val Met Phe Leu
                            40
                                                45
Ile Ile Thr Asp Lys Asn Leu His Ser Pro Met Tyr Phe Phe Leu Ala
                        55
                                            60
Asn Leu Ser Phe Val Asp Met Trp Leu Ser Ser Ala Thr Thr Pro Lys
                    70
                                        75
Met Ile Thr Asp Phe Leu Lys Glu Pro Lys Ile Ile Ser Phe Ala Gly
                85
                                    90
Cys Met Ser Gln Val Phe Phe Asp His Cys Val Gly Ala Val Glu Met
            100
                                105
Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu His Tyr Phe Thr Ile Met Ser Leu Lys Arg Cys Ala Gly Leu
                        135
                                            140
Val Leu Thr Ser Trp Ala Ile Ala Phe Val His Ala Met Ser Gln Leu
                   150
                                        155
Leu Ala Val Val Gln Leu Pro Leu Cys Gly His Met Glu Ile Asp Ser
               165
                                    170
Phe Phe Cys Asp Ile Pro Leu Ile Ile Lys Leu Ala Cys Met Asp Ser
           180
                               185
His Ile Leu Asp Ile Tyr Met Asn Val Asp Cys Gly Phe Val Val Val
                            200
                                                205
Thr Cys Phe Ile Leu Leu Ile Ser Tyr Thr Tyr Ile Leu Leu Thr
    210
                        215
                                            220
Val Arg Gln Ser Ser Lys Ala Gly Ala Ser Lys Ala Leu Ser Thr Cys
                    230
                                        235
Thr Ala His Ile Thr Val Val Met Ile Phe Phe Val Pro Cys Ile Phe
               245
                                    250
Ile Tyr Val Trp Pro Leu Ser Ile Thr Trp Leu Asp Lys Phe Leu Ala
           260
                                265
                                                   270
Val Phe Tyr Thr Val Phe Ala Pro Leu Leu Asn Pro Ala Ile Tyr Thr
       275
                            280
                                               285
Leu Arg Asn Lys Glu Met Arg Asn Ala Val Lys Lys Leu Lys Asn His
                        295
                                            300
Phe Met Asp Tyr Lys Gly Asn Thr
                    310
<210> 1539
<211> 312
<212> PRT
<213> Mus musculus
<400> 1539
Met Asp Arg Asp Asn Gln Thr Val Leu Ser Glu Phe Val Leu Leu Gly
```

```
Leu Ser Asn Ser Lys Asn Leu Gln Val Leu Leu Phe Leu Ile Phe Leu
                               25
Leu Leu Tyr Leu Leu Ile Met Ser Gly Asn Ile Ile Ile Gln Ile Leu
Ile Thr Thr Asp Pro His Leu His Ser Pro Met Tyr Phe Leu Leu Ala
Asn Leu Ser Phe Val Asp Met Trp Leu Ser Ser Asn Thr Thr Pro Lys
                   70
                                       75
Met Ile Ile Asp Phe Leu Ser Glu Asn Lys Thr Ile Ser Phe Ala Gly
                                   90
Cys Met Ser Gln Val Phe Leu Ser His Cys Ile Ala Gly Gly Glu Met
           100
                               105
Val Leu Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
       115
                           120
Pro Leu His Tyr Phe Thr Ile Met Asn Leu Lys Arg Cys Thr Gly Leu
                       135
Val Leu Thr Ser Trp Thr Ile Gly Phe Ile His Gly Ile Ser Tyr Phe
                   150
                                       155
Leu Val Val Gln Leu Pro Phe Cys Gly Pro Asn Lys Ile Asp Ser
                                   170
Phe Phe Cys Asp Met Pro Leu Val Ile Lys Leu Ala Cys Met Asp Ser
           180
                               185
His Asp Leu Asn Thr Leu Met Asn Ala Glu Cys Gly Val Val Ala Val
                           200
Thr Cys Phe Met Leu Leu Phe Ser Tyr Thr Tyr Ile Leu Ile Thr
                       215
                                            220
Val Arg Gln Thr Ser Lys Asn Gly Ala Ser Lys Ala Leu Ser Thr Cys
                   230
                                       235
Thr Ala His Ile Thr Val Val Met Ile Phe Phe Leu Pro Cys Met Phe
                                   250
               245
Ile Tyr Val Trp Pro Leu Ser Ile Thr Trp Leu Asp Lys Phe Leu Ala
           260
                               265
Val Phe Tyr Ser Val Phe Thr Pro Leu Leu Asn Pro Ala Ile Tyr Thr
       275
                           280
Leu Arg Asn Lys Glu Met Lys Asn Ala Met Lys Arg Phe Ile Gly Lys
                       295
Phe Leu Cys Pro Lys Gly Asn Ser
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1540

 Met
 Asp
 Gly
 Asp
 Asn
 Gln
 Thr
 Val
 Ser
 Glu
 Phe
 Ile
 Leu
 Trp
 Gly

 Leu
 Ala
 His
 Ser
 Lys
 Asn
 Ile
 Gln
 Val
 Leu
 Phe
 Val
 Ile
 Phe
 Leu

 Met
 Leu
 Tyr
 Leu
 Leu
 Ile
 Met
 Ser
 Gly
 Asn
 Ile
 Val
 Ile
 Leu
 Thr
 Leu

 Jle
 Thr
 Thr
 Asp
 Thr
 His
 Leu
 His
 Ser
 Pro
 Met
 Tyr
 Phe
 Leu
 Leu
 Ala

 So
 Tyr
 Ty

```
85
                                    90
Cys Met Ser Gln Val Phe Phe Ser His Cys Ile Ala Ala Gly Glu Met
                                105
            100
Val Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu His Tyr Phe Thr Ile Met Asn Leu Lys Arg Cys Ser Ser Leu
                       135
Val Leu Thr Ser Trp Thr Ile Gly Phe Ile His Gly Ile Ile Tyr Ile
                                       155
                   150
Val Val Ile Val His Leu Pro Phe Cys Gly Pro Asn Glu Ile Asp Ser
               165
                                   170
Phe Phe Cys Asp Met Pro Leu Val Ile Lys Leu Ala Cys Met Asp Tyr
           180
                               185
His Tyr Leu Asn Thr Leu Met Asn Ala Asp Cys Gly Leu Val Ala Ile
                            200
Thr Cys Phe Ile Leu Leu Leu Thr Ser Tyr Thr Tyr Ile Leu Met Thr
                        215
Val Cys Lys Ser Ser Lys Ala Gly Ala Ser Lys Ala Met Asn Thr Cys
                    230
                                        235
Thr Ala His Ile Thr Val Val Leu Ile Phe Phe Val Pro Cys Ile Phe
               245
                                    250
Ile Tyr Val Trp Pro Leu Asn Ile Thr Trp Leu Asp Lys Phe Phe Ala
                                265
Val Phe Tyr Ser Val Phe Thr Pro Leu Leu Asn Pro Ala Ile Tyr Thr
                           280
                                                285
Leu Arg Asn Lys Glu Met Lys Asn Ala Met Lys Arg Phe Ile Gly Asn
                       295
Phe Leu Gly Pro Lys Val Asn Leu
                    310
```

<210> 1541 <211> 308

<212> PRT

<213> Mus musculus

<400> 1541

Met Ser Pro Arg Cys Gln Asn Leu Cys Phe Trp Asp Phe Pro Ala His 10 Arg Ile Phe Arg Tyr Leu Leu Phe Val Ile Phe Leu Ile Leu Tyr Leu 25 Leu Ile Ile Ser Gly Asn Ile Val Ile Met Ile Leu Ile Thr Ile Asp 40 Arg His Leu His Ser Pro Met Tyr Phe Leu Leu Ala Asn Leu Ser Phe 55 Val Asp Ile Trp Leu Ser Ser Val Thr Thr Pro Lys Met Val Ile Asp 75 Phe Leu Arg Glu His Lys Thr Ile Ser Phe Glu Gly Cys Met Ser Gln 90 85 Val Phe Phe Ala His Cys Ile Ala Ala Gly Glu Met Val Leu Leu Leu 105 Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr 120 125 Phe Thr Ile Met Asn Leu Lys Arg Cys Thr Gly Leu Val Leu Thr Ser 135 140 Trp Thr Val Gly Phe Val His Ala Leu Ser Gln Leu Val Ala Val Leu 150 145 155

```
Gln Leu Pro Leu Cys Gly Pro Leu Glu Ile Asp Ser Phe Phe Cys Asp
Met Pro Leu Val Ile Lys Leu Ala Cys Thr Asp Ser His Asp Leu Asp
                                185
Ile Leu Met Asn Ala Asp Cys Gly Ile Val Val Val Ser Cys Phe Ile
                            200
       195
Met Leu Ile Ser Tyr Thr Tyr Ile Leu Ile Thr Val Arg Arg Ser
                       215
Ser Lys Ala Gly Ala Ser Lys Ala Leu Ser Thr Cys Thr Ala His Ile
                   230
                                        235
Thr Val Val Met Leu Leu Phe Leu Pro Cys Ile Phe Ile Tyr Val Trp
               245
                                    250
Pro Leu Asn Ile Thr Trp Leu Asp Lys Phe Leu Ala Val Phe Tyr Ser
           260
                               265
Val Val Thr Pro Leu Leu Asn Pro Ala Ile Tyr Thr Leu Arg Asn Lys
                            280
Glu Ile Lys Asn Ala Leu Lys Arg Phe Lys Ser Tyr Val Met Asn His
    290
                       295
                                            300
Lys Val Asn Thr
305
```

<210> 1542 <211> 309 <212> PRT

<213> Mus musculus

<400> 1542

Met Thr Ala Glu Asn Gln Ser Thr Val Thr Glu Phe Ile Leu Gly Gly Leu Thr Asn Arg Pro Glu Leu Gln Leu Pro Leu Phe Leu Leu Phe Leu 25 Gly Ile Tyr Val Val Thr Met 'Val Gly Asn Leu Gly Met Ile Thr Leu Ile Gly Leu Asn Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 60 Asn Leu Ser Leu Val Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys 70 75 Met Leu Ile Asn Phe Val Ser Gln Arg Asn Leu Ile Ser Tyr Val Gly 85 90 Cys Met Ser Gln Leu Tyr Phe Phe Leu Val Phe Val Ile Ala Glu Cys 100 105 110 Tyr Met Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Gln 115 120 125 Pro Leu Leu Tyr Asn Ile Ile Met Ser Pro Ala Leu Cys Ser Leu Leu 135 140 Val Ala Phe Val Tyr Ala Val Gly Leu Ile Gly Ser Ala Ile Glu Thr 155 Gly Leu Met Leu Lys Leu Asn Tyr Cys Glu Asp Leu Ile Ser His Tyr 170 165 Phe Cys Asp Ile Leu Pro Leu Met Lys Leu Ser Cys Ser Ser Thr Tyr 185 Asp Val Glu Met Ala Val Phe Phe Leu Ala Gly Phe Asp Ile Ile Val 200 205 Thr Ser Leu Thr Val Leu Ile Ser Tyr Ala Phe Ile Leu Ser Ser Ile 215 220 Leu Arg Ile Ser Ser Asn Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys 225 230 235 Ser Ser His Phe Ala Ala Val Gly Leu Phe Tyr Gly Ser Thr Ala Phe 250 Met Tyr Leu Lys Pro Ser Thr Ala Ser Ser Leu Ala Gln Glu Asn Val 265 270 260 Ala Ser Val Phe Tyr Thr Thr Val Ile Pro Met Phe Asn Pro Leu Ile 280 Tyr Ser Leu Arg Asn Lys Glu Val Lys Thr Ala Leu Asp Lys Thr Leu 295 Arg Arg Lys Val Phe 305 <210> 1543 <211> 309 <212> PRT <213> Mus musculus <400> 1543 Met Ala Ala Glu Asn Gln Ser Thr Val Thr Glu Phe Ile Leu Arg Gly 10 Leu Thr Asn Arg Pro Glu Leu Gln Leu Pro Leu Leu Leu Phe Leu 25 Gly Ile Tyr Ile Ile Thr Met Val Gly Asn Leu Gly Met Ile Thr Leu 40 Ile Gly Leu Asn Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 Asn Leu Ser Leu Val Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys 70 75 Met Leu Ile Asn Phe Val Ser Gln Arg Asn Leu Ile Ser Tyr Val Gly 90 Cys Met Ser Gln Leu Tyr Phe Phe Leu Val Phe Val Ile Ala Glu Cys 105 Tyr Met Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Gln 120 Pro Leu Leu Tyr Asn Ile Ile Met Ser Pro Ala Leu Cys Ser Leu Leu 135 140 Val Val Phe Val Tyr Ala Met Gly Leu Ile Gly Ser Thr Ile Glu Thr 150 155 Ser Leu Met Leu Lys Leu Asn Tyr Cys Glu Asp Leu Ile Ser His Tyr 165 170 Phe Cys Asp Ile Leu Pro Leu Met Lys Leu Ser Cys Ser Ser Thr Tyr 180 185 Asp Ile Glu Met Ala Val Phe Phe Leu Ala Gly Phe Asn Ile Ile Val 200 Thr Ser Leu Thr Val Leu Ile Ser Tyr Ala Phe Ile Leu Ser Ser Ile 215 Leu Arg Ile Ser Ser Asn Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys 230 235 Ser Ser His Phe Ala Ala Val Gly Leu Phe Tyr Gly Ser Thr Ala Phe 245 250 Met Tyr Leu Lys Pro Ser Thr Ala Ser Ser Leu Ala Gln Glu Asn Val 260 265 Ala Ser Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Leu Ile 280 285

Tyr Ser Leu Arg Asn Lys Glu Val Lys Thr Ala Leu Asp Lys Thr Leu

300

295

290

```
<211> 310
<212> PRT
<213> Mus musculus
<400> 1544
Met Thr Ala Lys Asn Ser Ser Val Thr Glu Phe Ile Leu Ala Gly Leu
                                  10
Thr Asp Gln Pro Gly Leu Arg Met Pro Leu Phe Phe Leu Phe Leu Gly
                              25
Phe Tyr Met Val Thr Val Val Gly Asn Leu Gly Leu Ile Ser Leu Ile
                          40
Gly Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn
                       55
Leu Ser Leu Ile Asp Phe Cys Tyr Ser Ser Thr Ile Ser Pro Lys Met
                                      75
                   70
Leu Met Ser Phe Ile Ser Lys Lys Asn Ile Ile Ser His Pro Gly Cys
                                  90
Met Ala Gln Leu Phe Phe Cys Phe Phe Val Ile Ser Glu Ser Phe
          100
                              105
Ile Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
                          120
                                             125
Leu Met Tyr Met Val Thr Met Ser Pro Gln Val Cys Leu Leu Leu Leu
         135
                                         140
Phe Gly Val Tyr Leu Met Gly Phe Val Gly Ala Met Ala His Thr Ile
                                     155
Ser Met Ala Arg Leu Thr Phe Cys Ala Asp Asn Ile Val Asn His Tyr
               165
                                  170
Met Cys Asp Ile Leu Pro Leu Leu Glu His Ser Cys Thr Ser Thr Tyr
                              185
Val Asn Glu Leu Val Val Phe Ile Phe Val Ser Phe Asp Ile Gly Val
                          200
                                             205
Pro Ile Val Thr Ile Phe Ile Ser Tyr Ala Leu Ile Leu Ser Ser Ile
                      215
                                          220
Leu His Met His Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys
                  230
                                      235
Ser Ser His Met Ile Val Val Cys Leu Phe Phe Gly Ser Gly Ala Phe
               245
                                  250
Met Tyr Leu Gln Pro Pro Ser Val Leu Ser Leu Asp Gln Gly Lys Val
                              265
Ser Ser Leu Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu Ile
       275 .
                           280
Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Val Arg Lys Thr Leu
                       295
Asp Arg Ile Phe Ser
                  310
```

<210> 1545 <211> 310

<212> PRT

(212) IIII

<213> Mus musculus

```
<400> 1545
Met Thr Ala Lys Asn Ser Ser Val Ile Glu Phe Ile Leu Ala Gly Leu
Thr Asp Gln Pro Gly Leu Arg Met Pro Leu Phe Phe Leu Phe Leu Gly
Phe Tyr Met Val Thr Val Val Gly Asn Leu Gly Leu Ile Ser Leu Ile
                            40
Gly Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe Asn
                       55
Leu Ser Val Ile Asp Phe Cys Tyr Ser Ser Thr Ile Ile Pro Lys Met
                   70
                                        75
Leu Met Asn Phe Ile Ser Arg Lys Asn Ile Ile Ser His Ser Gly Cys
                                    90
Met Thr Gln Leu Phe Phe Phe Cys Phe Phe Val Val Ser Glu Ser Phe
           100
                               105
Ile Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro
                            120
Leu Met Tyr Thr Val Thr Met Ser Pro Gln Val Tyr Leu Leu Leu
                        135
Leu Gly Val Tyr Val Met Gly Phe Ser Gly Ala Met Ala His Thr Gly
                    150
                                        155
Asn Leu Met Asn Leu Thr Phe Cys Ala Asp Asn Leu Ile Asn His Phe
               165
                                   170
Met Cys Asp Ile Leu Pro Leu Leu Glu Leu Ser Cys Asn Ser Thr Phe
                               185
Ile Asn Glu Leu Val Ile Phe Ile Val Val Ala Phe Asp Ile Gly Val
                            200
Pro Ile Val Thr Ile Phe Ile Ser Tyr Ala Leu Ile Leu Ser Ser Ile
                        215
                                            220
Leu Arg Met His Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr Tyr
                   230
                                        235
Ser Ser His Leu Ile Val Val Cys Leu Phe Phe Gly Ser Gly Ala Phe
                245
                                    250
Met Tyr Leu Lys Pro Pro Ser Ile Leu Pro Leu Asp Gln Gly Lys Val
                                265
Ser Ser Leu Phe Tyr Met Ile Val Val Pro Met Leu Asn Pro Leu Ile
                           280
                                               285
Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg Lys Thr Leu
                        295
Gly Lys Arg Ile Leu Ser
305
                    310
<210> 1546
<211> 313
<212> PRT
<213> Mus musculus
<400> 1546
Met Leu Lys Ser Asn Thr Thr Phe Val Thr Glu Phe Leu Phe Glu Gly
                                   10
Phe Ser Gly Phe Gly Trp Gln His Arg Leu Ala Phe Phe Ala Ile Phe
                                2.5
Leu Ala Leu Tyr Phe Leu Thr Leu Ser Gly Asn Val Ile Ile Val Ser
                            40
Ile Ile His Leu Asp His His Leu His Thr Pro Met Tyr Phe Phe Leu
                        55
```

```
Ala Ile Leu Ser Ile Ser Asp Thr Cys Tyr Thr Val Thr Ile Ile Pro
                    70
                                        75
Arg Met Leu Ser Asp Leu Leu Asn Pro Tyr His Thr Ile Ala Phe Arg
                                    90
                85
Asp Cys Val Val Gln Ile Phe Phe Tyr Leu Thr Phe Gly Ile Asn Asn
                                105
Cys Phe Leu Leu Met Val Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys
                            120
                                                125
Asn Pro Leu Arg Tyr Ser Val Ile Met Gly Arg Lys Ala Cys Val His
                        135
Leu Ala Ser Gly Ser Leu Gly Ile Gly Leu Gly Met Ala Ile Val Gln
                   150
                                        155
Val Thr Ser Val Phe Ser Leu Pro Phe Cys Asp Arg Phe Val Ile Pro
                                   170
               165
His Phe Phe Cys Asp Val Arg Pro Leu Leu Lys Leu Ala Cys Thr Asp
                                185
Thr Thr Ile Asn Glu Ile Ile Asn Phe Val Val Ser Val Phe Val Leu
                            200
Ile Leu Pro Met Gly Val Val Phe Ile Ser Tyr Val Val Ile Ile Ser
                        215
Thr Ile Leu Lys Ile Ala Ser Ala Glu Gly Arg Lys Lys Ala Phe Ala
                   230
                                        235
Thr Cys Ala Ser His Leu Thr Val Val Ile Ile His Tyr Gly Cys Thr
               245
                                   250
Ala Ile Ile Tyr Met Lys Pro Lys Ser Gln Ser Leu Leu Gly Gln Glu
            260
                               265
Arg Leu Ile Ser Val Thr Tyr Thr Leu Ile Thr Pro Leu Leu Asn Pro
                           280
                                               285
       275
Leu Val Tyr Thr Leu Arg Asn Lys Glu Val Lys Asp Ala Leu Arg Arg
                       295
Ala Met Trp Gln Lys Pro Leu Ser Ser
                    310
```

<211> 313

<212> PRT

<213> Mus musculus

<400> 1547

Met Pro Lys Lys Asn Ser Thr Val Val Ala Glu Phe Leu Phe Glu Gly 10 Phe Ser Ser Phe Asp Trp Gln His Arg Leu Gly Phe Phe Ile Val Phe 20 25 Leu Thr Leu Tyr Leu Leu Thr Leu Ser Gly Asn Met Ile Ile Val Thr 40 Ile Ile Arg Leu Asp Arg His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Met Leu Ser Ile Ser Glu Thr Phe Tyr Thr Ile Ala Ile Ile Pro 75 70 Arg Met Leu Ala Gly Leu Leu Asn Pro Tyr Gln Ala Ile Asp Ile Gln 90 Gly Cys Ala Thr Gln Leu Phe Phe Tyr Leu Thr Phe Gly Ile Asn Asn 100 105 Cys Phe Leu Leu Thr Ala Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys 120 115 125 Asn Pro Leu Arg Tyr Ser Val Ile Met Gly Lys Lys Ala Cys Ile Leu

```
130
                       135
Leu Ala Ser Gly Ser Leu Gly Ile Gly Leu Ser Met Ala Ile Val Gln
                    150
                                        155
Val Thr Ser Val Phe Gly Leu Pro Phe Cys Asp Gly Phe Val Ile Ala
                                    170
His Phe Phe Cys Asp Val Arg Pro Leu Leu Lys Leu Ala Cys Thr Asp
                                185
           180
Thr Thr Ile Asn Glu Ile Ile Asn Phe Ile Val Ser Val Cys Val Leu
                           200
Val Leu Pro Met Gly Leu Val Phe Ile Ser Tyr Val Val Ile Ile Ser
                        215
                                            220
Thr Ile Leu Lys Ile Ala Ser Ala Glu Gly Arg Lys Lys Ala Phe Ala
                                        235
                   230
Thr Cys Ala Ser His Leu Thr Val Val Ile Ile His Tyr Gly Cys Ala
               245
                                   250
Ser Ile Ile Tyr Leu Lys Pro Lys Ser Gln Thr Ser Leu Gly Gln Asp
            260
                                265
Arg Leu Ile Ser Val Thr Tyr Thr Val Ile Thr Pro Leu Leu Asn Pro
                            280
Val Val Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Leu Arg Lys
                       295
Ala Ile Gly Arg Arg Pro Leu Ser Ser
```

<210> 1548 <211> 315

<212> PRT

<213> Mus musculus

<400> 1548

Met Asp Leu Thr Thr Trp Met Asn Asn Tyr Thr Thr Gln Ser Asp Phe Thr Leu Val Gly Phe Phe Ser Gln Ser Lys His Ser Ala Leu Leu Ala 25 Val Val Ile Phe Val Val Phe Leu Met Ala Leu Ser Gly Asn Ala Leu 40 Leu Ile Leu Leu Val Leu Ser Asp Thr His Leu His Thr Pro Met Tyr 55 Phe Phe Ile Ser Gln Leu Ser Leu Met Asp Met Met Tyr Ile Ser Val 75 Thr Val Pro Lys Met Leu Met Asp Gln Val Leu Gly Ser His Lys Ile 8.5 90 Ser Ala Ala Cys Gly Met Gln Met Phe Leu Tyr Val Thr Leu Ala 105 Gly Ser Glu Phe Phe Leu Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val 120 Ala Ile Cys His Pro Leu Arg Tyr Pro Val Leu Met Asn Tyr Arg Val 135 140 Cys Leu Leu Met Ser Val Cys Trp Ile Leu Gly Ser Leu Asp Gly 150 155 Phe Met Phe Thr Pro Val Thr Met Thr Phe Pro Phe Cys Gly Ser Arg 165 170 Glu Ile His His Phe Phe Cys Glu Val Pro Ala Val Thr Lys Leu Ser 185 190 Cys Ser Asp Thr Trp Leu Tyr Glu Thr Leu Met Tyr Val Cys Cys Val 200 195

```
Leu Met Leu Leu Ile Pro Val Thr Val Ile Ser Gly Ser Tyr Thr Ser
                       215
                                            220
Ile Leu Leu Thr Val Leu Arg Met Asn Ser Ala Glu Gly Arg Lys
                    230
                                        235
Ala Leu Ala Thr Cys Ser Ser His Met Thr Val Val Thr Leu Phe Tyr
                                    250
Gly Ala Ala Ile Tyr Thr Tyr Ile Phe Pro Ala Ser Leu His Thr Pro
                                265
Glu Lys Asp Met Val Val Ser Val Phe Tyr Thr Ile Leu Thr Pro Leu
                            280
Leu Asn Pro Leu Ile Tyr Ser Phe Arg Asn Lys Asn Val Thr Glu Ala
                       295
Met Lys Lys Leu Leu Val Val Ser Thr Leu Phe
                    310
```

<210> 1549 <211> 315

<212> PRT

<213> Mus musculus

<400> 1549

Met Gly Ser Glu His Trp Asn Tyr Ser Thr Ala Gly Phe Val Leu Thr 10 Ser Leu Phe Asn Asn Ser Gln Thr His Leu Phe Leu Phe Ser Met Val 25 Met Leu Val Tyr Ile Leu Ala Met Ala Gly Asn Thr Ala Met Val Leu 40 Leu Ile Trp Met Asp Thr Arg Leu His Thr Pro Met Tyr Phe Leu Leu 55 Ser Gln Leu Ser Phe Leu Asp Ile Phe Phe Thr Ser Val Thr Val Pro 70 75 Lys Met Ile Val Gly Phe Leu Phe Gly Trp Thr Ser Ile Ser Phe Gly 85 90 Gly Cys Gly Ala Gln Met Phe Phe Phe Met Phe Leu Gly Ala Ala Glu 105 Cys Leu Leu Ala Leu Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys 120 Asn Pro Leu Arg Tyr Pro Val Leu Met Ser Arg Arg Val Cys Leu Leu 135 140 Met Val Val Ala Ser Trp Leu Gly Gly Ser Leu Asn Ala Ser Ile Gln 150 155 Thr Ser Leu Thr Leu Gln Phe Pro Tyr Cys Gly Ser Arg Lys Ile Ser 165 170 His Phe Phe Cys Glu Val Pro Ser Leu Leu Met Leu Ala Cys Ala Asp 185 190 Thr Glu Ala Tyr Lys Gln Val Leu Phe Val Thr Gly Val Val Val Leu 200 Leu Val Pro Ile Thr Phe Ile Thr Ala Ser Tyr Ala Leu Ile Leu Ala 215 220 Ala Val Leu Arg Met His Ser Val Glu Gly Arg Gln Lys Ala Leu Ala 230 235 Thr Cys Ser Ser His Leu Thr Val Val Asn Leu Phe Tyr Gly Pro Leu 245 250 Val Tyr Thr Tyr Met Leu Pro Ala Ser Tyr His Ser Pro Gly Gln Asp 265 Asp Val Val Ser Val Phe Tyr Thr Val Leu Thr Pro Met Leu Asn Pro

275 280 Val Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Met Lys Lys 295 Ala Met Arg Arg Cys Gly Val Asn Arg Asn Ala 310 <210> 1550 <211> 317 <212> PRT <213> Mus musculus <400> 1550 Met Ala Trp Ala Gly Asn Gln Thr Leu Ile Ser His Phe Val Leu Leu 10 Gly Leu Phe Thr His Ser Pro Leu His Leu Phe Leu Phe Ser Ile Ile 25 Met Val Met Phe Leu Val Ala Leu Ser Gly Asn Gly Leu Met Ile Leu Leu Ile Leu Met Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu 55 Ser Trp Leu Ser Leu Met Asp Leu Met Leu Ile Ser Thr Ile Val Pro 70 75 Arg Met Ala Ala Asp Phe Leu Leu Gly Arg Gly Ser Ile Ser Phe Ala 90 Gly Cys Gly Leu Gln Ile Leu Phe Phe Leu Thr Leu Leu Gly Asp Glu 100 105 Cys Phe Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser 115 120 125 Asn Pro Leu Arg Tyr Ser Val Ile Met Ser Arg Arg Val Cys Trp Leu 135 Met Val Ala Gly Ser Trp Leu Phe Gly Leu Val Asp Gly Leu Ile Gln 150 155 Ala Val Phe Thr Leu Arg Phe Pro Tyr Cys Gly Ser Gln Glu Ile Asp 165 170 His Phe Phe Cys Glu Val Pro Ala Val Leu Lys Leu Ala Cys Ala Asp 180 185 190 Thr Ser Leu Tyr Glu Thr Met Ile Tyr Val Cys Cys Val Leu Met Leu 200 205 Leu Leu Pro Phe Ser Val Ile Ser Ala Ser Tyr Leu Arg Ile Leu Val 215 220 Ala Val Leu Arg Met Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ala 230 235 Thr Cys Ser Ser His Met Ile Val Val Ser Leu Phe Tyr Gly Ala Ala 245 250 Met Ile Thr Tyr Met Arg Pro Gln Ala Tyr His Ser Ser Lys Gln Asp 260 265 270 Lys Val Val Ser Ala Phe Tyr Thr Met Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Leu Arg Lys 295 300 Leu Leu Gly Lys Cys Pro Cys Gly Gly Gly Thr Leu Gly 310

<210> 1551 <211> 315

<400> 1551 Met Gly Ile Trp Leu Asn Glu Ser Ser Val Asp Gly Phe Ile Leu Leu 10 Gly Ile Phe Ser Gln Ser Gln Thr Asp Leu Leu Phe Ser Thr Val 25 Met Leu Val Phe Thr Val Ala Leu Cys Gly Asn Val Leu Leu Ile Leu Leu Ile Tyr Thr Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser Gln Leu Ser Leu Met Asp Leu Met Leu Val Cys Asn Ile Val Pro 70 75 Lys Met Ala Val Asn Phe Leu Ser Gly Arg Lys Ser Ile Ser Phe Ala 90 Gly Cys Gly Ile Gln Ile Gly Phe Phe Val Ser Leu Val Gly Ser Glu 100 105 Gly Leu Leu Gly Leu Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser 120 His Pro Leu His Tyr Pro Ile Leu Met Ser Gln Lys Val Cys Leu Gln 135 140 Ile Ala Gly Ser Ser Trp Ala Phe Gly Ile Leu Asp Gly Ile Ile Gln 150 155 Met Val Ala Ala Met Ser Leu Pro Tyr Cys Gly Ser Arg Tyr Ile Asp 165 170 His Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ala Cys Ala Asp 180 185 190 Thr Ser Leu Phe Asp Thr Leu Leu Phe Ala Cys Cys Val Phe Met Leu 200 205 Leu Leu Pro Phe Ser Ile Ile Val Thr Ser Tyr Ala Arg Ile Leu Gly 215 Ala Val Leu Arg Met His Ser Ala Gln Ser Arg Lys Lys Ala Leu Ala 230 235 Thr Cys Ser Ser His Leu Thr Ala Val Ser Leu Phe Tyr Gly Ala Ala 245 250 Met Phe Ile Tyr Leu Arg Pro Arg Arg Tyr Arg Ala Pro Ser His Asp 265 Lys Val Val Ser Ile Phe Tyr Thr Val Leu Thr Pro Met Leu Asn Pro 280 285 Leu Ile Tyr Ser Leu Arg Asn Arg Glu Val Met Gly Ala Leu Arg Lys 295 Gly Leu Asp Arg Cys Arg Val Gly Ser Gln His 310

<210> 1552 <211> 316 <212> PRT

<213> Mus musculus

<400> 1552

Met Pro Leu Asn Ala Gln Lys Thr Met Glu Asn Asp Ser Ser Val Ser l 5 10 15 Glu Phe Ile Leu Met Gly Leu Thr Asp Gln Pro Glu Leu Gln Leu Pro 20 25 30 Leu Phe Val Leu Phe Leu Val Asn Tyr Thr Val Thr Val Met Gly Asn

```
Leu Ser Leu Met Asn Leu Ile Cys Leu Asn Ser Asn Leu His Thr Pro
                        55
Met Tyr Phe Phe Ile Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser
Met Val Phe Thr Pro Lys Met Leu Met Gly Phe Val Val Glu Lys Asn
                85
                                    90
Ile Ile Ser Phe Arg Gly Cys Met Thr Gln Leu Phe Phe Phe Leu Phe
                                105
Phe Val Asn Ser Glu Ser Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg
                            120
Tyr Val Ala Ile Cys Gln Pro Leu Leu Tyr Lys Ala Val Met Ser Pro
   130
                       135
                                           140
Gly Ile Cys Phe Leu Leu Ile Phe Cys Thr Tyr Leu Met Gly Leu Val
                    150
                                        155
Ser Ala Leu Phe His Thr Gly Phe Met Ile Arg Leu Asn Phe Cys Asp
                165
                                    170
Ser Asn Val Ile Asn His Tyr Met Cys Asp Ile Phe Pro Leu Phe Arg
                                185
Leu Ser Cys Ser Ser Thr Tyr Leu Thr Glu Leu Val Ser Ser Ala Val
       195
                           200
                                                205
Val Gly Thr Ala Ile Ile Leu Cys Cys Leu Ile Ile Leu Ile Ser Tyr
                        215
Gly Met Ile Leu Tyr Asn Ile Ile His Met Ser Ser Gly Lys Gly Trp
                    230
                                        235
Ser Lys Ala Leu Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu
                245
                                    250
Phe Tyr Val Thr Gly Met Leu Ala Tyr Val Lys Pro Ser Ser Ala Glu
            260
                                265
Thr Val Gly Gln Gly Lys Ile Phe Ser Val Phe Tyr Thr Phe Leu Val
                            280
Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys
                        295
Leu Ala Val Lys Lys Thr Trp Lys Arg Leu Thr Cys
                    310
<210> 1553
<211> 316
<212> PRT
<213> Mus musculus
<400> 1553
Met Gln Val Met Lys Gln Met Ile Thr Glu Ser Asn Ser Ser Val Thr
Glu Phe Ile Leu Met Gly Leu Thr Val Gln Lys Glu Leu Gln Leu Pro
Leu Phe Val Leu Phe Leu Leu Asn Tyr Thr Ala Thr Val Val Gly Asn
```

Leu Ser Leu Met Asn Leu Ile Cys Leu Asn Ser His Leu His Thr Pro

Met Tyr Phe Phe Ile Phe Asn Leu Ser Cys Ile Asp Phe Cys Tyr Ser

Phe Val Cys Asn Pro Thr Met Leu Thr Ser Phe Val Ser Glu Gln Asn

Thr Ile Ser Tyr Glu Gly Cys Met Thr Gln Leu Phe Phe Cys Phe

105

75

110

90

55

70

100

40

45

35

```
Phe Val Asn Ser Glu Cys Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg
                           120
Tyr Val Ala Ile Cys His Pro Leu Gln Tyr Thr Thr Val Met Ser Pro
                       135
Lys Ile Cys Cys Leu Leu Val Phe Gly Ser Tyr Leu Met Gly Phe Ala
                   150
                                       155
Gly Ala Leu Thr His Thr Gly Phe Met Ile Arg Leu Arg Phe Cys Asn
               165
                                   170
Ser Asn Ile Ile Asn His Tyr Met Cys Asp Ile Phe Pro Leu Leu Gln
                               185
Leu Ser Cys Thr Ser Thr Tyr Val Asn Glu Leu Val Ser Ser Ala Val
                        200
Val Gly Thr Ile Ile Ile Leu Ser Ser Ile Ile Ile Leu Val Ser Tyr
                       215
                                           220
Ala Met Ile Leu Ser Asn Ile Leu His Met Ser Ser Lys Gly Trp
                    230
                                       235
Ser Lys Ala Leu Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu
                                   250
               245
Phe Tyr Gly Ser Gly Leu Leu Ala Tyr Ile Lys Pro Thr Ser Ala Glu
                               265
Thr Val Asp Gln Gly Lys Phe Leu Ser Ile Phe Tyr Thr Leu Val Ile
                           280
                                               285
Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys
                       295
Leu Ala Val Lys Arg Thr Met Lys Arg Val Thr Ser
                   310
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1554

Met Gly Leu Glu Asn Gly Ser Leu Val Thr Glu Phe Ile Leu Leu Gly 10 Leu Thr Asn Asp Pro Asp Leu Gln Leu Pro Leu Phe Leu Phe Leu 25 Leu Ile Tyr Thr Thr Ala Val Gly Asn Leu Ala Leu Ile Thr Leu 40 Ile Ala Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Leu 55 60 Asn Leu Ser Cys Ile Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys 70 75 Met Leu Met Asn Phe Leu Val Arg Lys Asn Ile Ile Ser Tyr Met Gly 85 90 Cys Met Thr Gln Leu Tyr Phe Phe Cys Phe Phe Ala Ile Cys Glu Cys 105 Cys Val Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Leu Tyr Asn Ile Thr Met Ser Pro Lys Val Cys Ser Tyr Leu 135 140 Met Leu Gly Ser Tyr Ile Met Gly Phe Ser Gly Ala Met Ile His Thr 150 155 Gly Cys Ile Leu Arg Leu Thr Phe Cys Asp Arg Asn Ile Ile Asn His 170 165 Tyr Phe Cys Asp Leu Phe Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr

```
180
                               185
Tyr Ala Asn Glu Ile Glu Ile Leu Ile Val Gly Gly Lys Asp Ile Ile
                           200
Val Pro Ser Val Ile Ile Phe Thr Ser Tyr Gly Phe Ile Leu Ser Asn
                        215
Ile Leu Gln Met Arg Ser Thr Ala Gly Met Ser Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ser Ser His Ile Leu Ala Val Ser Leu Phe Phe Gly Ser Cys Ala
               245
                                   250
Phe Met Tyr Leu Gln Pro Ser Ser Pro Gly Ser Met Asp Gln Gly Lys
           260
                               265
Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Met Asn Pro Leu
                           280
                                               285
Ile Tyr Ser Phe Arg Asn Lys Asp Val Lys Ile Ala Leu Arg Lys Ile
                       295
Phe Gly Gln Arg Arg Phe Ser
```

<210> 1555 <211> 310 <212> PRT

<213> Mus musculus

<400> 1555

Met Gly Val Glu Asn Gly Ser Leu Val Thr Glu Phe Ile Leu Gln Gly 10 Leu Thr Ser Asp Pro Asp Leu Gln Leu Pro Leu Phe Leu Leu Phe Leu 20 25 Leu Ile Tyr Thr Thr Ala Leu Gly Asn Leu Ser Leu Ile Thr Leu 40 Ile Ala Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Leu 55 60 Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys 75 Met Leu Met Asn Phe Leu Val Arg Lys Asn Phe Ile Ser Tyr Val Gly 8.5 90 Cys Met Thr Gln Leu Tyr Leu Phe Val Phe Phe Ala Val Ser Glu Cys 105 Cys Val Leu Ser Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Leu Tyr Asn Ile Ala Met Ser Pro Lys Val Cys Ser Tyr Leu 135 140 Met Leu Gly Ser Tyr Ile Met Gly Phe Ser Gly Ala Met Ile His Thr 150 155 Gly Trp Met Leu Arg Leu Thr Phe Cys Asp Arg Ser Ile Ile Asn His 165 170 Tyr Phe Cys Asp Leu Leu Pro Leu Leu Gln Leu Ser Cys Thr Asn Thr 185 Tyr Ala Asn Glu Ile Glu Ile Ile Ile Val Gly Gly Ile Asp Ile Ile 200 Val Pro Ser Ile Ile Ile Phe Thr Ser Tyr Gly Phe Val Leu Ser Asn 215 220 Ile Phe Gln Met Arg Ser Thr Asp Gly Arg Ser Lys Ala Phe Ser Thr 230 235 Cys Ser Ser His Ile Val Val Ser Leu Phe Phe Gly Ser Gly Ala 245 250

<210> 1556 <211> 316 <212> PRT <213> Mus musculus

<400> 1556 Met Arg Val Met Lys Gln Met Val Ser Glu Ser Asn Tyr Ser Val Thr Glu Phe Ile Phe Met Gly Leu Thr Val Gln Arg Glu Phe Gln Leu Pro 25 Leu Phe Val Leu Phe Leu Leu Asn Tyr Thr Ala Thr Val Val Gly Asn 40 Leu Ser Leu Met Asn Leu Ile Cys Leu Asn Ser His Leu His Thr Pro 55 Met Tyr Phe Phe Ile Phe Asn Leu Ser Cys Ile Asp Phe Cys Tyr Ser 75 70 Leu Val Cys Asn Pro Thr Met Leu Thr Ser Phe Val Ser Glu His Asn 85 90 Thr Ile Ser Tyr Ala Gly Cys Met Ser Gln Leu Phe Leu Phe Cys Phe 100 105 Phe Ala Asn Ser Glu Cys Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg 120 125 Tyr Val Ala Ile Cys His Pro Leu Lys Tyr Thr Thr Val Met Ser Pro 135 Lys Ile Cys Ser Leu Leu Val Phe Gly Ser Tyr Leu Met Gly Phe Ala 150 155 Gly Ala Met Thr His Thr Gly Phe Met Ile Arg Leu Ser Phe Cys Asn 170 Ser Asn Ile Ile Asn His Tyr Met Cys Asp Ile Phe Pro Leu Leu Gln 180 185 Leu Ser Cys Thr Ser Thr Tyr Val Asn Glu Leu Val Ser Ser Ala Val 200 205 Val Gly Thr Ile Ile Ile Leu Ser Ser Leu Ile Ile Leu Val Ser Tyr 215 220 Ala Met Ile Leu Ser Asn Ile Leu His Met Ser Ser Lys Gly Trp 230 235 Ser Lys Ala Leu Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu 245 250 Phe Tyr Gly Ser Gly Leu Leu Ala Tyr Val Lys Pro Ser Ser Ala Glu 265 Thr Val Gly Gln Gly Lys Ile Phe Ser Val Phe Tyr Thr Leu Val Val 280 Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys 295 Phe Ala Val Lys Arg Thr Met Lys Arg Val Thr Ser 310

<211> 313 <212> PRT <213> Mus musculus <400> 1557 Met Lys Gln Met Ala Thr Lys Asn Asp Ser Ser Val Ser Glu Phe Ile 10 Leu Met Gly Leu Thr Asp Gln Pro Glu Leu Gln Leu Pro Leu Phe Phe 25 Leu Phe Leu Leu Asn His Thr Val Ile Val Val Gly Asn Leu Ser Leu 40 Met Ser Leu Ile Ile Leu Asn Ser Asn Leu His Thr Pro Met Tyr Phe 55 60 Phe Leu Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Phe Val Phe 75 Thr Pro Lys Met Leu Met Ser Phe Val Ser Glu Lys Asn Ile Ile Pro 8.5 90 Phe Thr Gly Cys Met Thr Gln Leu Phe Phe Phe Cys Phe Phe Ala His 100 105 Ser Glu Ser Trp Val Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala 120 Ile Cys Lys Pro Leu Leu Tyr Lys Ala Ile Met Leu Pro Arg Ile Cys 135 140 Cys Leu Leu Met Phe Val Ser Tyr Leu Ile Gly Phe Ala Ser Ala Met 150 155 Val Leu Ala Gly Leu Met Ile Arg Leu Asn Phe Cys Asn Asn Asn Ile 165 170 Ile Asn His Tyr Met Cys Asp Ile Phe Pro Val Leu Arg Ile Ser Cys 180 185 Ser Asn Thr Tyr Leu Asn Glu Leu Val Ser Thr Ala Val Val Gly Thr 200 Ala Ile Ile Leu Cys Ser Leu Ile Ile Phe Ile Ser Tyr Ala Met Ile 215 220 Leu Phe Asn Ile Ile His Met Ser Ser Gly Lys Gly Trp Ser Lys Ala 230 235 Leu Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser Phe Phe Tyr Gly 245 250 Ser Gly Leu Leu Ala Tyr Val Lys Pro Ser Ser Ala Glu Thr Val Gly 265 Gln Gly Lys Phe Phe Ser Val Phe Tyr Thr Phe Leu Val Pro Met Leu 280 285 Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Val 295 Lys Lys Thr Ile Lys Arg Ile Thr Ser 310 <210> 1558 <211> 317 <212> PRT <213> Mus musculus <400> 1558 Met Ile Ser Met Leu Ala Gly Asn Gly Ser Ser Val Thr Glu Phe Val

10

<210> 1557

```
Leu Ala Gly Leu Thr Asp Arg Pro Glu Leu Gln Leu Pro Leu Phe Tyr
                                25
Leu Phe Leu Ile Ile Tyr Ile Ile Thr Val Val Gly Asn Leu Gly Leu
                            40
Ile Ile Leu Ile Gly Leu Asn Pro His Leu His Thr Pro Met Tyr Tyr
                        55
Phe Leu Phe Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Phe
                   70
                                       75
Ser Pro Lys Met Leu Ile Asn Phe Val Ser Glu Lys Asn Ser Ile Ser
                                   90
Tyr Ala Gly Cys Met Thr Gln Leu Phe Leu Phe Leu Phe Phe Val Ile
                               105
Ser Glu Cys Tyr Met Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala
       115
                           120
                                               125
Ile Cys Asn Pro Leu Leu Tyr Lys Val Thr Met Ser Pro Gln Ile Cys
                       135
Ser Val Ile Ser Phe Ala Ala Tyr Gly Met Gly Phe Ala Gly Ser Ser
                    150
                                        155
Ala His Thr Gly Cys Met Leu Arg Leu Thr Phe Cys Asn Val Asn Val
                165
                                    170
Ile Asn His Tyr Leu Cys Asp Ile Leu Pro Leu Leu Gln Leu Ser Cys
                               185
           180
Thr Ser Thr Tyr Val Asn Glu Val Val Val Leu Ile Val Val Gly Ile
                            200
Asn Ile Thr Val Pro Ser Phe Thr Ile Leu Ile Ser Tyr Val Phe Ile
                                           220
                        215
Leu Ala Asn Ile Leu Asn Ile Lys Ser Thr Gln Gly Arg Ala Lys Ala
                   230
                                       235
Phe Ser Thr Cys Ser Ser His Ile Met Ala Ile Ser Leu Phe Phe Gly
               245
                                   250
Ser Ala Ala Phe Met Tyr Leu Lys Tyr Ser Ser Gly Ser Met Glu Gln
                                265
Gly Lys Ile Ser Ser Val Phe Tyr Thr Asn Val Gly Pro Met Leu Asn
                            280
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg
                       295
Lys Ser Leu Ile Lys Phe Arg Glu Lys Thr Asp Phe Asn
```

```
<210> 1559
```

<400> 1559

 Met
 Met
 Gln
 Met
 Thr
 Met
 Glu
 Asn
 Lys
 Ser
 Ser
 Val
 Ser
 Glu
 Phe
 Ile

 Leu
 Met
 Gly
 Leu
 Thr
 Asp
 Gln
 Pro
 Glu
 Leu
 Gln
 Leu
 Pro
 Leu
 Phe
 Val
 Met
 Gly
 Asn
 Leu
 Phe
 Val
 Met
 Gly
 Asn
 Leu
 Ser
 Leu
 Asn
 Leu
 Asn
 Leu
 Asn
 Ser
 Leu
 Asn
 Leu
 Asn
 Ser
 Phe
 Asn
 Leu
 His
 Thr
 Pro
 Met
 Tyr
 Phe

 Met
 July
 Asn
 Leu
 Asn
 Ser
 Asn
 Leu
 His
 Thr
 Pro
 Met
 Tyr
 Phe

 Met
 July
 Asn
 Leu
 Asn
 Ser
 Phe
 Asn
 Leu
 His
 Thr
 Pro
 Met
 Val
 Phe

<211> 313

<212> PRT

<213> Mus musculus

```
85
                                    90
Phe Arg Gly Cys Met Thr Gln Leu Phe Phe Phe Cys Val Phe Ile Asn
                               105
Ala Glu Ser Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala
                            120
Ile Gly Gln Pro Leu Met Tyr Gln Val Val Met Ser Pro Lys Ile Cys
                       135
                                           140
Cys Leu Leu Ile Phe Gly Ser Tyr Leu Met Gly Phe Ile Ser Ala Thr
                   150
                                       155
Ala His Thr Gly Cys Met Val Arg Leu Arg Phe Cys Asp Ser Asn Ile
               165
                                   170
Ile Asn His Tyr Met Cys Asp Ile Phe Pro Leu Leu Gln Leu Ser Cys
           180
                               185
                                                    190
Ser Ser Thr Tyr Val Asn Glu Leu Met Ser Tyr Ile Ala Val Gly Thr
                           200
                                               205
Ala Ile Ile Leu Cys Ser Leu Ile Ile Leu Val Ser Tyr Ala Met Ile
                        215
Leu Phe Asn Ile Ile His Ile Ser Ser Gly Lys Gly Trp Ser Lys Ala
                                        235
Leu Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu Phe Tyr Gly
                245
                                    250
Ser Gly Leu Leu Ala Tyr Val Asn Pro Ser Ser Ala Glu Thr Val Gly
                               265
Gln Ala Lys Phe Phe Ser Val Phe Tyr Thr Leu Leu Val Pro Met Leu
                           280
                                                285
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Met
                       295
Lys Lys Ser Trp Lys Arg Ile Thr Ser
                    310
```

<210> 1560 <211> 314 <212> PRT

<213> Mus musculus

<400> 1560

Met Arg Arg Leu Asn Thr Thr Pro His His Thr Asn Gly Phe Ile Leu 10 Val Gly Phe Ser Glu Trp Pro Arg Leu Glu Met Ala Leu Leu Val Val 25 Ile Ser Ile Phe Tyr Ile Leu Thr Leu Leu Gly Asn Ser Ala Ile Ile 40 Ile Leu Ser Arg Leu Asp Pro Lys Leu His Thr Pro Met Tyr Phe Phe Leu Ala Asn Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val 75 Pro Gln Met Leu Lys Asn Ile Gln Ser His Glu Arg Ser Ile Thr Tyr 85 Val Gly Cys Ile Ala Gln Leu Phe Ile Phe Leu Ser Leu Gly Ser Thr 105 110 Glu Cys Val Leu Leu Ser Val Met Ala Phe Asp Arg Tyr Val Ala Ile 120 Cys Gln Pro Leu Arg Tyr Thr Val Ile Met His Pro Gln Leu Cys Gln 135 140 Gln Leu Ala Ala Val Ala Trp Ile Thr Gly Phe Ser Asn Ser Leu Val 145 150 155

```
Gln Thr Val Leu Thr Ser Leu Leu Pro Arg Cys Gly Gln Tyr Gln Ile
                                    170
Glu Asn Phe Phe Cys Glu Val Pro Ala Met Leu Gln Leu Ser Cys Val
            180
                                185
Asp Thr Trp Val Asn Glu Val Glu Met Tyr Ala Ala Val Val Ile
        195
                            200
Lys Val Ile Pro Leu Gly Leu Ile Leu Phe Ser Tyr Ile Asn Ile Val
                        215
                                           220
Arg Ala Val Ile Lys Ile Gln Ser Ser Glu Gly Arg Lys Lys Ala Phe
                    230
                                        235
Asn Thr Cys Gly Ser His Leu Leu Val Val Ile Met Phe Tyr Gly Ser
                245
                                    250
Ala Ile Ser Gly Tyr Ala Tyr Met Ala Pro Lys Ser Ser Ser Ala Lys
           260
                                265
Leu Lys Gly Lys Leu Leu Ala Leu Phe Tyr Gly Leu Ile Thr Pro Met
                            280
Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Ala Ala
                        295
                                            300
Val Lys Lys Val Leu Gly Arg Glu Gln Glu
                    310
```

<211> 313

<212> PRT

<213> Mus musculus

<400> 1561

10 Ile Thr Gln Ser Thr Glu Leu Gln Leu Pro Leu Phe Gly Val Phe Phe 25 Ile Ile Tyr Ala Val Thr Val Met Gly Asn Leu Gly Met Ile Ile Leu 35 Thr Lys Leu Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Ile Arg 55 His Leu Ala Phe Ile Asp Leu Gly Asn Ser Thr Val Ile Cys Pro Lys Met Leu Met Asp Phe Val Met Asp Glu Lys Asn Ile Ser Phe Tyr Ala 85 90 Cys Ala Thr Gln Met Ser Phe Phe Val Leu Phe Ile Ile Ser Glu Leu 100 105 110 Phe Ile Leu Ser Ser Met Ala Tyr Asp Cys Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Leu Tyr Ser Val Ile Met Ser Gln Arg Leu Cys His Val Leu 135 140 Val Asp Ile Pro Tyr Leu Tyr Ser Thr Phe Gln Ala Leu Leu Phe Thr 150 155 Ser Lys Ile Phe Thr Leu Thr Phe Cys Gly Ser Asn Ile Ile Ser His 165 170 Phe Tyr Cys Asp Ala Val Tyr Leu Leu Pro Thr Leu Cys Ser Asn Ala 185 Glu Glu Ile Gln Leu Leu Ile Ile Leu Phe Ser Ala Leu Asn Leu Leu 200 195 205 Ser Ser Leu Leu Ile Val Leu Gly Leu Tyr Val Leu Ile Leu Ile Ala 215 220 Ile Cys Arg Met His Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr

Met Gly Gln Gln Asn Thr Thr Ser Leu Pro Gly Phe Ile Leu Met Gly

```
225
                   230
                                        235
Cys Gly Ser His Leu Thr Val Val Val Phe Tyr Gly Thr Leu Leu
               245
                                    250
Phe Met Tyr Leu Gln Pro Lys Ser Thr Asp Ser Leu Glu Asn Asp Lys
                                265
Ile Thr Ser Val Phe Tyr Thr Leu Val Ile Pro Met Ile Asn Pro Leu
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Phe Asn Arg Ala
                       295
Leu Lys Asn Pro Phe Lys Ile Asn Thr
                    310
<210> 1562
<211> 309
<212> PRT
<213> Mus musculus
<400> 1562
Met Lys His Ser Asn Asp Ser Lys Val Thr Glu Phe Ile Leu Leu Gly
                                   10
Phe Ala Gly Gln Asn Glu Ser Trp His Ile Leu Phe Val Val Phe Leu
                               25
Val Ile Tyr Ile Ala Thr Leu Val Gly Asn Ile Gly Met Ile Leu Leu
                           40
Ile Lys Leu His Ser Ser Leu His Thr Pro Met Tyr Phe Phe Leu Gln
                       55
His Leu Ala Phe Val Asp Leu Cys Tyr Ser Ser Ala Ile Thr Pro Arg
                   70
                                       75
Thr Leu Gln Asn Phe Val Ser Thr Lys Pro Ser Ile Ser Phe Thr Gly
Cys Leu Ala Gln Leu Leu Val Tyr Gly Ile Phe Val Thr Ser Asp Cys
           100
                                105
Phe Ile Leu Ala Ala Met Ala Val Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Arg Tyr Pro Ile Ile Met Ser Gln Arg Leu Cys Ile Leu Leu
                       135
                                            140
Leu Leu Gly Ser Tyr Thr Met Gly Phe Leu Asn Ala Thr Val Asn Thr
                   150
                                       155
Gly Phe Thr Phe Leu Ser Asn Phe Cys Lys Ser Asn Val Ile Asn His
               165
                                   170
Phe Phe Cys Asp Val Pro Pro Ile Leu Ala Leu Ser Cys Ser Ser Ile
           180
                               185
Asp Leu Asn Ile Met Val Leu Thr Ile Phe Val Gly Phe Asn Leu Thr
                           200
Phe Thr Val Ser Val Val Ile Leu Ser Tyr Thr Phe Ile Leu Ala Ala
                        215
Ile Leu Arg Met Ser Ser Ala Ser Gly Arg Arg Lys Ala Phe Ser Thr
                   230
                                        235
Cys Ala Ser His Met Thr Ala Val Thr Ile Phe Tyr Gly Thr Leu Ser
                                   250
                245
Tyr Met Tyr Val Leu His Gly Thr Asn Arg Ser Gln Glu Gln Glu Lys
                               265
Val Ala Ser Val Phe Tyr Gly Ile Met Ile Pro Met Leu Asn Pro Leu
                           280
                                               285
```

Ile Tyr Ser Leu Arg Asn Gln Asp Val Ile Glu Ala Leu Arg His Ile

300

295

```
<211> 311
<212> PRT
<213> Mus musculus
<400> 1563
Met Arg Asn His Thr Val Thr Thr Phe Ile Leu Leu Gly Leu Thr Asp
                                   10
Asp Gln Gln Leu Gln Val Leu Ile Phe Ile Ile Leu Phe Phe Thr Tyr
                               25
Ser Leu Ser Ile Ser Gly Asn Leu Ala Ile Ile Ser Leu Ile Leu Val
Asp Pro His Leu Lys Thr Ala Met Tyr Tyr Phe Leu Lys Asn Phe Ala
                       55
Val Leu Glu Ile Ser Phe Thr Ser Ala Ser Ile Pro Arg Tyr Leu Tyr
Asn Ile Ala Thr Gly Asp Lys Met Ile Thr Tyr Asn Ala Cys Val Ala
               85
                                   90
Gln Val Phe Phe Thr Asp Leu Phe Gly Val Thr Glu Phe Phe Leu Leu
                              105
Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu His
       115
                           120
                                              125
Tyr Leu Thr Ile Met Ser Thr Thr Val Cys Arg Arg Leu Val Phe Cys
                      135
                                          140
Ser Trp Val Ala Gly Leu Phe Ile Leu Ile Pro Pro Leu Ser Leu Gly
                  . 150 · 155 · 160
Leu Asn Leu Gln Phe Cys Asp Ser Asn Ile Ile Asp His Phe Ile Cys
               165
                                   170
Asp Ala Ser Pro Leu Leu Lys Ile Ser Cys Ser Asp Thr Trp Phe Met
                               185
Glu Gln Thr Val Leu Ile Cys Ala Val Leu Thr Leu Ile Ile Thr Leu
                           200
                                              205
Val Cys Val Val Leu Ser Tyr Val Asn Ile Ile Lys Thr Val Leu Arg
                      215
Phe Pro Ser Ala Gln Gln Lys Lys Ala Phe Ser Thr Cys Ser Ser
                   230
                                       235
His Met Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile Tyr
               245
                                   250
Ile Lys Pro Ser Ala Lys Asp Glu Val Ala Ile Asn Lys Gly Val Thr
                               265
Val Leu Thr Thr Ser Ile Ala Pro Met Leu Asn Pro Phe Ile Tyr Thr
                           280
Leu Arg Asn Arg Gln Val Lys Gln Ala Phe Trp Asp Ser Ile Lys Arg
   290
                       295
Ile Ile Ala Phe Ser Lys Gln
305
                   310
```

<210> 1564

<211> 312

<212> PRT

<213> Mus musculus

```
<400> 1564
Met Lys Asn Tyr Thr Ala Ile Thr Thr Phe Ile Leu Val Gly Leu Thr
                                    10
Asn Asp Ala Asn Leu Gln Ile Leu Leu Phe Ile Phe Leu Leu Thr
                                25
Tyr Leu Leu Ser Val Ile Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu
Val Asp Ser His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
                       55
Ser Leu Leu Glu Val Ser Phe Thr Thr Val Cys Ile Pro Arg Phe Leu
                                        75
                   7.0
Tyr Thr Met Ala Ser Gly Asp Asn Thr Ile Thr Tyr Asn Ala Cys Ala
               85
                                    90
Thr Gln Leu Phe Phe Val Ile Val Leu Gly Val Thr Glu Phe Phe Leu
           100
                               105
                                                    110
Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                           120
His Tyr Thr Thr Ile Met Ser Asn Arg Val Cys Ile Gln Phe Leu Ile
                       135
Gly Cys Tyr Leu Met Ala Leu Ile Ile Val Ile Pro Pro Tyr Ser Ile
                    150
                                        155
Ser Phe Lys Leu Glu Phe Cys Asn Ser Asn Val Ile Asp His Phe Gly
               165
                                    170
Cys Asp Ala Ala Pro Ile Leu Lys Ile Ser Cys Ser Asn Thr Glu Phe
                               185
Ile Glu Arg Phe Val Leu Ile Leu Ala Val Leu Thr Leu Met Phe Thr
                            200
                                                205
Leu Leu Cys Val Val Met Ser Tyr Thr Tyr Ile Ile Arg Thr Ile Leu
                       215
                                            220
Arg Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                   230
                                        235
Ser His Ile Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile
                245
                                    250
Tyr Ile Lys Pro Ser Ala Lys Glu Gly Val Ala Val Asn Lys Val Val
                                265
Ser Val Leu Thr Thr Ser Val Ala Pro Val Met Asn Pro Phe Ile Tyr
                                               285
                           280
Thr Leu Arg Asn Lys Gln Val Val Gln Ala Phe Lys Asp Met Ile Lys
                       295
Arg Ile Ala Ser Ile Ile Lys Ser
305
                   310
<210> 1565
<211> 311
<212> PRT
<213> Mus musculus
<400> 1565
Met Arg Asn His Thr Val Thr Thr Phe Ile Leu Leu Gly Leu Thr Glu
                5
                                   10
Asp Pro Gln Ile Gln Ser Leu Leu Leu Ile Phe Leu Leu Leu Thr Tyr
                                25
Leu Leu Asn Ile Thr Gly Asn Leu Thr Ile Ile Leu Leu Thr Leu Ile
                           40
```

Asp Pro His Leu Lys Thr Pro Met Tyr Phe Phe Leu Gln Asn Phe Ser

55

```
Phe Leu Glu Ile Leu Phe Thr Ser Ala Cys Ile Pro Arg Tyr Leu Tyr
                    70
                                       7.5
Asn Leu Ala Thr Gly Asp Lys Thr Ile Thr Tyr Gly Ala Cys Ala Ser
                85
Gln Ala Phe Phe Thr Asp Leu Phe Gly Val Thr Glu Phe Phe Leu Leu
                               105
Ala Thr Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His
                           120
                                              125
Tyr Thr Thr Ile Met Ser Thr Ala Cys Arg Arg Leu Leu Cys Cys
                                   . 140
                       135
Trp Val Ala Gly Val Ile Ile Ile Leu Pro Pro Phe Ser Leu Ser Gln
                   150
                                       155
Asn Leu Gln Phe Cys Asp Ser Asn Ile Ile Asp Ser Phe Leu Cys Asp
                                   170
               165
                                                       175
Val Ser Pro Phe Leu Lys Ile Ser Cys Ser Asp Thr Trp Val Ile Glu
                               185
Gln Met Val Ile Gly Cys Ala Val Leu Thr Phe Ile Thr Thr Leu Phe
                           200
                                               205
Cys Val Val Leu Ser Tyr Val Tyr Ile Ile Lys Thr Ile Leu Lys Phe
                        215
Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser His
                   230
                                       235
Met Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile Tyr Val
                                   250
Lys Pro Ser Ala Lys Asp Ser Val Ala Ile Asn Lys Gly Val Ile Val
                                                    270
            260
                               265
Leu Thr Thr Ser Ile Ala Pro Met Leu Asn Pro Phe Ile Tyr Thr Leu
                           280
                                               285
Arg Asn Lys Gln Val Lys Gln Ala Phe Asn Asp Ser Ile Lys Lys Ile
                       295
                                            300
Ala Leu Glu Cys Gln Asn Gly
```

<211> 309

<212> PRT

<213> Mus musculus

<400> 1566

Met Gly Asp Asp Asn Asp Thr Asp Ile Thr Glu Phe Ile Leu Leu Gly 10 Phe Ser Gly Tyr Gly Phe Leu Gln Gly His Leu Phe Trp Gly Val Leu 20 25 Cys Ile Tyr Val Val Thr Leu Leu Gly Asn Ser Leu Ile Val Leu Leu 40 Thr Leu Ala Asp Ser Ala Leu His Ser Pro Met Tyr Phe Phe Leu Arg 55 His Phe Ser Val Val Glu Ile Leu Tyr Thr Thr Thr Ile Val Pro Arg 75 Met Leu Ala Asp Leu Arg Ser Ser Cys Pro Thr Ile Pro Leu Ala Ser 85 90 Cys Phe Thr Gln Leu Tyr Phe Phe Ala Leu Phe Gly Ile Ala Glu Cys 100 105 Cys Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Cys 120 Pro Leu His Tyr Thr Thr Leu Met Ser Gln Gly Thr Tyr Thr Gly Leu

```
130
                      135
                                            140
Val Gly Ala Ser Tyr Leu Ala Gly Val Ile Ser Gly Thr Thr His Ser
                    150
                                        155
Ile Phe Ile Phe Thr Leu Pro Phe Arg Gly Ala Lys Thr Ile His His
                165
                                    170
Phe Leu Cys Asp Ile Leu Pro Val Leu Arg Leu Ala Thr Ala Ser Thr
           180
                               185
Phe Trp Gly Glu Val Gly Asn Leu Phe Val Thr Ile Thr Phe Ile Phe
                           200
Ala Pro Phe Leu Leu Ile Val Ala Ser Tyr Ala Cys Ile Leu Ala Thr
                       215
                                            220
Ile Leu Gly Val Ala Thr Ser Gln Gly Arg Gln Lys Leu Phe Ser Thr
                   230
                                        235
Cys Ser Ser His Leu Phe Val Val Ile Leu Phe Phe Gly Thr Gly Thr
               245
                                    250
Val Ala Tyr Met Arg Pro Gln Ala Asp Ser Phe Gly Asp Thr Asp Gln
                                265
Ile Ile Thr Leu Phe Tyr Thr Val Val Thr Pro Met Cys Asn Pro Phe
                            280
Val Tyr Thr Leu Arg Asn Lys Glu Val Thr Gly Ala Met Arg Arg Leu
                        295
Val Lys Arg Tyr Phe
305
```

<210> 1567 <211> 312 <212> PRT <213> Mus musculus

<400> 1567

Met Gly Asp Asp Asn Asp Thr Asp Ile Thr Glu Phe Ile Leu Leu Gly 10 Phe Ser Gly Tyr Gly Phe Leu Gln Gly His Leu Phe Trp Gly Val Leu 25 Cys Ile Tyr Val Val Thr Leu Leu Gly Asn Ser Leu Ile Val Leu Leu 40 Thr Leu Ala Asp Ser Ala Leu His Ser Pro Met Tyr Phe Phe Leu Arg , 60 55 His Phe Ser Val Val Glu Ile Leu Tyr Thr Thr Ile Val Pro Arg 70 75 Met Leu Ala Asp Leu Arg Ser Ser Cys Pro Thr Ile Pro Leu Ala Ser 90 8.5 Cys Phe Thr Gln Leu Tyr Phe Phe Ala Leu Phe Gly Ile Ala Glu Cys 105 Cys Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Cys 120 Pro Leu His Tyr Thr Thr Leu Met Ser Gln Gly Thr Tyr Thr Gly Leu 135 Val Gly Ala Ser Tyr Leu Ala Gly Val Ile Ser Gly Thr Thr His Ser 150 155 Ile Phe Ile Phe Thr Leu Pro Phe Arg Gly Ala Lys Thr Ile His His 165 170 Phe Leu Cys Asp Ile Leu Pro Val Leu Arg Leu Ala Thr Ala Ser Thr 180 185 Phe Trp Gly Glu Val Gly Asn Leu Phe Val Thr Ile Thr Phe Ile Phe 200 205

```
Val Pro Phe Leu Leu Ile Val Ala Ser Tyr Ala Cys Ile Leu Val Thr
                        215
                                            220
Ile Leu Gly Val Ala Thr Ser Gln Gly Arg Gln Lys Leu Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Leu Phe Val Val Ile Leu Phe Phe Gly Thr Ala Thr
                                    250
Val Ala Tyr Met Arg Pro Gln Ala Asp Ser Phe Gly Asn Thr Asp Gln
                               265
Ile Leu Thr Leu Val Tyr Thr Val Val Thr Pro Met Cys Asn Pro Phe
                           280
                                                285
Val Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Met Arg Arg Leu
                       295
Met Lys Arg Tyr Leu Trp Gly Pro
                    310
```

<210> 1568 <211> 313 <212> PRT

<213> Mus musculus

<400> 1568

Met Gly Gly Thr Asn Gln Ser Ser Val Ser Glu Phe Leu Leu Gly 10 Leu Ser Arg Gln Pro Gln Gln Gln Gln Leu Ile Phe Leu Leu Phe 20 25 Leu Ile Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile Ile Leu 40 Ala Ile Ser Thr Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu 55 Ser Asn Leu Ser Phe Val Asp Val Cys Phe Ser Ser Thr Thr Val Pro 75 Lys Val Leu Ala Ile His Ile Leu Arg Asn Gln Ala Ile Ser Phe Ser 90 Gly Cys Leu Thr Gln Leu Tyr Phe Leu Cys Val Phe Ala Asp Met Asp 105 Asn Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys 120 His Pro Leu His Tyr Thr Thr Lys Met Thr His Gln Leu Cys Ala Phe 135 140Leu Val Val Gly Ser Trp Met Val Ala Ser Leu Asn Ala Leu Leu His 150 155 Thr Leu Leu Val Ala Gln Leu Tyr Phe Cys Gly Asp Asn Val Ile Pro 165 170 His Phe Phe Cys Glu Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp 185 Thr His Leu Asn Glu Leu Met Ile Leu Ala Val Ala Gly Leu Ile Met 200 Leu Ala Pro Phe Val Cys Ile Leu Leu Ser Tyr Ile Leu Ile Ala Cys 215 220 Ala Ile Leu Lys Ile Ser Ser Thr Gly Arg Trp Lys Ala Phe Ser Thr 230 235 Cys Gly Ser His Leu Ala Val Val Cys Leu Phe Tyr Gly Thr Ile Ile 245 250 Ser Leu Tyr Phe Asn Pro Ser Ser Ser His Ser Ala Gly Arg Asp Met 265 Ala Ala Met Met Tyr Thr Val Val Thr Pro Met Met Lys Pro Phe

275 280 Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Gly Ala Leu Arg Lys Val 295 Leu Thr Met Arg Phe Ile Ser Thr Gln 305 <210> 1569 <211> 312 <212> PRT <213> Mus musculus <400> 1569 Met Glu Pro Glu Asn His Thr Gly Ile Pro Glu Phe Tyr Leu Leu Gly Leu Ser Glu Asn Pro Glu Ile Gln Ser Val Leu Phe Gly Leu Phe Leu 25 Ser Leu Tyr Leu Val Thr Val Phe Gly Asn Leu Leu Ile Ile Leu Ala Ile Val Ser Asp Pro Lys Leu His Thr Pro Met Tyr Leu Phe Leu Ser 55 60 Asn Leu Ser Phe Ser Asp Ile Cys Phe Thr Ser Thr Thr Val Pro Lys Met Leu Gly Ile Gln Thr Gln Ser Lys Leu Ile Thr Tyr Ala Gly 85 90 Cys Ile Thr Gln Met Tyr Phe Phe Thr Val Phe Gly Leu Leu Asp Asn 105 Leu Leu Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His 115 120 125 Pro Leu His Tyr Thr Val Leu Met Asn Pro Lys Leu Cys Ser Gln Leu 135 Leu Leu Leu Ala Trp Leu Ile Ser Ile Leu Gly Ala Leu Pro Glu Ser 150 155 Leu Thr Ala Leu Arg Leu Ser Phe Cys Ala Val Val Glu Ile Pro His 165 170 Tyr Phe Cys Glu Leu Pro Glu Val Leu Lys Leu Ala Cys Ser Asp Thr 185 Phe Ile Asn Asn Val Val Leu Tyr Ile Val Thr Gly Ile Met Gly Phe 200 205 Phe Pro Leu Ala Gly Ile Leu Phe Ser Tyr Ser Gln Ile Val Thr Ser 215 220 Val Leu Arg Ile Ser Thr Val Gly Gly Lys Tyr Lys Ala Phe Ser Thr 230 235 Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Cys Leu 245 250 Gly Val Tyr Leu Ser Ser Ile Trp Thr Gln Ala Ser Trp Ala Gly Val 265 Phe Ala Ser Val Leu Tyr Thr Val Val Thr Pro Met Met Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Arg Ala Leu Asn Thr Leu 295 300 Leu Cys Ser Val Pro Ser Ser Ser

<210> 1570 <211> 319 <400> 1570 Met Val Gln Gly Asn Trp Thr Ser Val Thr Val Phe Val Phe Leu Gly 10 Phe Ser His Tyr Pro Arg Ile Glu Val Thr Val Phe Val Leu Cys Leu 25 Leu Met Tyr Leu Ile Thr Leu Leu Gly Asn Thr Ile Leu Ile Ser Ile 40 Thr Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 Asn Leu Ser Phe Leu Asp Ile Trp Tyr Thr Ser Ser Ala Leu Thr Pro 70 75 Met Leu Ala Asn Phe Val Ser Gly Lys Asn Thr Ile Ser Phe Ser Gly Cys Ala Ser Gln Met Tyr Phe Ser Leu Ala Met Gly Ser Thr Glu Cys 100 105 Val Leu Ser Met Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Arg Tyr Pro Ile Ile Met Asn Arg Arg Val Phe Val Gln Ile 135 140 Ala Gly Ser Ser Trp Val Thr Gly Cys Leu Thr Ala Leu Val Glu Thr 150 155 Gly Pro Val Ile His Leu Ser Leu Cys Gly Asn Ser Ile Ile Asn His 165 170 Phe Thr Cys Glu Ile Leu Ala Leu Leu Lys Met Ala Cys Gly Asp Thr 180 185 Ser Met Val Gln Leu Ile Met Leu Val Ile Ser Ile Leu Leu Pro 200 Leu Pro Met Leu Leu Ile Cys Val Ser Tyr Ala Ser Ile Leu Ser Asn . 215 Ile Leu Arg Ile Ser Ser Met Asp Gly Arg Ser Lys Ala Phe Ser Thr 230 235 Cys Ala Ala His Leu Thr Val Val Val Leu Phe Tyr Gly Thr Ala Leu 245 250 Ser Met Tyr Leu Lys Pro Ser Ser Val Asn Ser Gln Glu Ile Asp Lys 265 Phe Met Ala Leu Ile Tyr Ala Gly Leu Thr Pro Met Leu Asn Pro Ile 280 285 Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Met Ala Val Lys Leu 295 300 Leu Met Arg Asn Pro Phe Ser Ala Ile Leu Thr Ser Val Leu Lys 310 315

<210> 1571 <211> 316

<212> PRT

<213> Mus musculus

<400> 1571

Met Glu Trp Glu Asn Arg Thr Tyr Leu Glu Glu Phe Phe Leu Lys Gly 1 5 5 5 10 10 15 15 Leu Ser Gly Tyr Pro Gly Leu Glu His Leu Phe Phe Val Val Ile Leu 20 25 5 30 Met Met Tyr Ala Val Ile Leu Val Gly Asn Gly Thr Leu Ile Leu

```
35
                            40
Ser Ile Phe Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Gly
                       55
                                            60
Asn Leu Ser Phe Leu Asp Ile Cys Phe Thr Thr Ser Ser Ile Pro Phe
Thr Leu Val Ser Phe Leu Ser Glu Arg Lys Thr Ile Ser Phe Leu Gly
                                    90
Cys Ala Val Gln Met Phe Leu Gly Leu Ala Met Gly Thr Thr Glu Cys
                               105
Val Leu Leu Gly Met Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Asn
                           120
Pro Leu Arg Tyr Pro Leu Ile Met Ser Lys Ser Ser Tyr Val Thr Met
                       135
Ala Thr Gly Ser Trp Phe Ser Gly Val Ala Asn Ser Ala Val Gln Thr
                   150
                                       155
Ala Phe Val Met Arg Leu Pro Phe Cys Gly Asn Val Ile Asn His Phe
                                   170
Leu Cys Glu Ile Leu Ala Val Met Lys Met Ala Cys Thr Asp Ile Ser
                                185
Gly Asn Glu Phe Ile Met Leu Val Ala Thr Thr Leu Phe Thr Leu Met
                            200
Pro Leu Val Leu Ile Val Ile Ser Tyr Ser Leu Ile Ile Ser Ser Ile
                       215
Leu Ser Ile Arg Ser Ala Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ala His Phe Thr Val Val Ile Ile Phe Tyr Gly Thr Ile Leu Phe
               245
                                    250
Met Tyr Met Lys Pro Lys Ser Lys Asp Lys Phe Asp Ala Asp Asp Leu
                               265
           260
Asp Ala Thr Asp Lys Leu Ile Ser Met Phe Tyr Gly Val Met Thr Pro
                            280
Leu Met Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu
                       295
Ala Ile Lys Asn Leu Lys Gly Arg Leu Leu Gly Lys
                    310
```

<210> 1572 <211> 305

<212> PRT

<213> Mus musculus

<400> 1572

Met Glu Asn His Thr Leu Leu Asp Glu Phe Ile Leu Leu Gly Ile Pro 10 Gln Thr Gln Gly Leu Glu Thr Leu Leu Phe Val Val Phe Leu Phe Ile 25 Tyr Ile Phe Thr Leu Leu Gly Asn Leu Leu Ile Phe Thr Ala Ile Val Ser Ser Ser Thr Leu His Thr Pro Met Tyr Phe Phe Leu Gly Leu Leu 55 Ser Ile Phe Asp Met Leu Phe Pro Ser Val Thr Cys Pro Lys Met Leu 75 Leu Tyr Leu Ser Gly Lys Ser Pro Ala Ile Ser Tyr Arg Gly Cys Ile 85 90 Ala Gln Leu Phe Phe Tyr His Phe Leu Gly Ser Thr Glu Gly Cys Leu 100 105 110

Tyr Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu 120 Arg Tyr Met Leu Ile Met Lys Pro Gly Val Cys Leu Gly Leu Val Ile 135 Val Ser Trp Leu Ile Gly Cys Leu Gln Ser Gly Ile Leu Thr Phe Phe 150 155 Thr Phe Gln Leu Thr Tyr Cys Gly Pro Asn His Val His His Phe Phe 170 165 Cys Asp Ile Pro Ala Val Leu Pro Leu Ala Cys Thr Asp Asn Lys Leu 185 Ala Arg Lys Val Gly Ser Ile Asn Val Gly Phe Leu Ala Leu Met Leu 200 Leu Phe Ser Val Cys Val Ser Tyr Val His Ile Gly Val Ala Ile Leu 215 220 Arg Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Phe Phe Thr Cys Ser 235 , 230 Ala His Leu Thr Ala Ile Leu Cys Ala Tyr Gly Pro Val Ile Ile Ile 245 250 Tyr Leu Gln Arg Thr Pro Asn Pro Leu Leu Gly Ala Val Val Gln Ile 265 Leu Asn Asn Ile Val Ser Pro Met Leu Asn Ser Leu Ile Tyr Ser Leu 280 285 Arg Asn Lys Glu Val Lys Arg Ala Leu Arg Arg Val Phe His Ser Leu Ala 305

<210> 1573

<211> 311

<212> PRT

<213> Mus musculus

<400> 1573

Met Ser Ile Arg Asn His Ser Thr Val Thr Glu Phe Leu Leu Gly 5 10 Leu Thr Glu Glu Pro Ala Leu Gln Leu Pro Leu Phe Cys Leu Phe Leu 25 Gly Ile Tyr Ile Val Thr Met Val Gly Asn Leu Gly Met Ile Ala Val 40 Ile Lys Leu Asn Ser Gln Leu His Thr Pro Met Tyr Tyr Phe Leu Ser 55 Ser Leu Ser Phe Leu Asp Phe Cys Tyr Ser Ser Val Val Thr Pro Lys 70 75 Met Leu Val Gly Phe Leu Ser Arg Asp Lys Ala Ile Ser Tyr Ser Asp 85 90 Cys Met Ala Gln Leu Phe Phe Cys Ile Phe Val Ile Ser Glu Cys 105 Tyr Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser 120 125 Pro Leu Leu Tyr Ala Val Ile Met Ser Pro Arg Val Cys Ser Leu Leu 135 Val Ala Val Phe Ser Val Gly Phe Thr Asp Ala Val Ile His Gly 150 155 Gly Cys Ile Leu Arg Leu Ser Phe Cys Lys Ser Asn Ile Ile Lys His 165 170 175 Tyr Phe Cys Asp Ile Val Pro Leu Ile Gln Leu Ser Cys Ser Ser Thr

```
185
           180
Tyr Ile Asp Glu Leu Leu Ile Phe Val Ile Gly Gly Phe Asn Met Ile
                           200
Ala Thr Ser Leu Thr Ile Val Ile Ser Tyr Gly Phe Ile Leu Ser Ser
                       215
Ile Leu Arg Ile His Ser Lys Glu Gly Arg Ser Lys Ala Phe Ser Thr
                   230
                                        235
Cvs Ser Ser His Leu Thr Ala Val Leu Ile Phe Tyr Gly Ser Leu Met
               245
                                   250
Ser Met Tyr Leu Lys Pro Ala Ser Asn Gly Ser Val Ile His Glu Lys
           260
                               265
Val Thr Ser Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Leu
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys His Ala Leu Val Lys Leu
                       295
Val Arg Arg Lys Ile Ser Ser
```

<211> 321

<212> PRT

<213> Mus musculus

<400> 1574

Met Val Glu Arg Met Gln Tyr Leu Asn Gln Ser Val Val Ser Gln Phe 10 Phe Leu Glu Gly Leu Met Tyr Thr Ala Glu His Pro Gly Leu Phe Phe 20 25 Leu Leu Phe Leu Leu Ile Tyr Ser Ile Thr Val Ser Gly Asn Leu Leu 40 Ile Leu Leu Thr Val Gly Ser Asp Pro His Leu Arg Ser Pro Met Tyr 55 His Phe Leu Gly His Leu Ser Phe Leu Asp Ala Cys Leu Ser Thr Val 70 75 Thr Val Pro Lys Val Met Ala Gly Leu Leu Thr Leu Asp Gly Lys Val 90 Ile Ser Phe Gln Gly Cys Ala Leu Gln Leu Tyr Cys Phe His Phe Leu 100 105 Ala Ser Thr Glu Cys Phe Leu Tyr Thr Val Met Ala Tyr Asp Arg Tyr 120 Leu Ala Ile Cys Gln Pro Leu His Tyr Pro Val Val Met Asn Lys Arg 135 140 Val Cys Ala Gly Leu Ala Gly Ser Thr Trp Ala Ile Gly Ala Met His 150 155 Ser Ala Ile His Thr Ser Leu Thr Phe Arg Leu Leu Tyr Cys Gly Pro 165 170 Gln His Ile Ala Tyr Phe Phe Cys Asp Ile Pro Pro Val Leu Lys Leu 185 Ala Cys Ala Asp Thr Thr Ile Asn Glu Leu Val Met Leu Ala Asn Ile 200 205 Gly Val Val Ala Ala Gly Cys Leu Ile Leu Ile Ile Ile Ser Tyr Ala 215 220 Phe Ile Val Ala Ala Val Leu Arg Ile Arg Thr Ala Glu Gly Arg Gln 230 235 Arg Ala Phe Ser Thr Cys Thr Ala His Leu Thr Val Val Leu Leu Tyr 245 250

<210> 1575 <211> 308 <212> PRT <213> Mus musculus

Asn Arg Leu Trp

<400> 1575 Met Gln Gly Pro Asn Gln Thr Phe Val Thr Glu Phe Ile Leu Leu Gly Phe Ser Leu Ser Pro Arg Thr Thr Pro Leu Leu Phe Ser Ala Phe Leu 25 Ile Ile Tyr Leu Leu Ile Ile Leu Gly Asn Gly Leu Ile Phe Ile Leu 40 Ile Cys Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Ile Gly 55 60 Val Leu Ser Met Leu Asp Leu Gly Tyr Thr Thr Thr Thr Val Pro Gln 70 75 Met Leu Ala His Leu Ala Ser Gln Lys Lys Thr Ile Ser Tyr Ser Asn 85 90 Cys Val Ala Gln Met Tyr Ile Phe Leu Val Leu Gly Val Thr Glu Ser 105 Trp Leu Phe Ala Ile Met Ser Ile Asp Arg Tyr Val Ala Ile Cys His 120 Pro Leu Arg Tyr Lys Val Ile Met Ser Pro Cys Leu Cys Gly Val Met 135 140 Ala Ile Phe Cys Gly Leu Cys Gly Val Thr Ala Ala Leu Val Tyr Thr 150 155 Ile Phe Ala Met Arg Leu Pro Tyr Cys Gly Pro Asn Lys Ile Asn His 170 165 Phe Phe Cys Glu Val Pro Ala Val Leu Lys Leu Ala Cys Ala Asp Thr 180 185 Ser Val Asn Asp His Val Asp Phe Ile Leu Gly Phe Ser Val Ile Leu 200 205 Ile Pro Leu Ser Leu Ile Leu Val Ile Tyr Ile Asn Ile Phe Thr Ser 215 Ile Leu Lys Ile Arg Ser Ala Gln Gly Arg Leu Lys Ala Phe Ser Thr 230 235 Cys Ala Ser His Ile Thr Val Val Thr Met Phe Cys Val Pro Ala Met 245 250 Val Met Tyr Met Lys Pro Gly Ser Lys Ala Ser Pro Glu Glu Asp Lys 265 Lys Leu Ala Leu Phe Tyr Asn Val Ile Ser Ala Phe Leu Asn Pro Val 280 285 Ile Tyr Ser Leu Arg Asn Lys Glu Cys Glu Glu Gly Phe Pro Gln Gly 290 295

<400> 1577

```
<210> 1576
<211> 315
<212> PRT
<213> Mus musculus
<400> 1576
Met Gln Gly Ser Ser Tyr Glu Asn His Ser Ser Val Ser Glu Phe Ile
                                    10
Leu Leu Gly Phe Ser Ser Asn Phe Gln Leu Asn Ile Ile Leu Phe Asn
            20
                                25
Val Phe Phe Leu Tyr Leu Ser Thr Leu Val Gly Asn Gly Leu Ile
                            40
Val Thr Leu Ile His Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Ser Val Leu Ser Met Leu Asp Met Ser Tyr Val Thr Thr
Val Pro Gln Met Leu Val His Leu Leu Cys Gln Lys Lys Thr Ile Ser
                85
                                    90
Tyr Ser Gly Cys Val Ala Gln Met Tyr Ile Phe Leu Val Leu Gly Ile
                               105
Thr Glu Gly Trp Leu Phe Ser Val Met Ala Tyr Asp Arg Tyr Val Ala
       115
                           120
                                                125
Ile Cys His Pro Leu Arg Tyr Lys Val Ile Met Arg Pro Trp Leu Cys
                       135
                                            140
Gly Ala Met Val Val Phe Cys Gly Leu Trp Gly Val Ser Cys Ser Leu
                   150
                                        155
Ile Tyr Thr Val Phe Thr Met Arg Leu Pro Tyr Cys Gly Pro Asn Glu
               165
                                    170
Ile Asn His Phe Phe Cys Glu Val Pro Ala Val Leu Lys Leu Ala Cys
            180
                                185
Ala Asp Thr Ser Leu Asn Asp Arg Ile Asp Phe Ile Leu Gly Phe Ile
       195
                            200
Leu Leu Val Pro Leu Ser Phe Ile Leu Ala Ser Tyr Val Cys Ile
                       215
                                            220
Phe Ala Thr Ile Leu Arg Ile Arg Ser Ala Gln Gly Arg Leu Lys Ala
                   230
                                        235
Phe Ser Thr Cys Ala Ser His Ile Thr Val Val Thr Met Phe Cys Gly
                245
                                    250
Pro Ala Met Phe Met Tyr Met Asn Pro Gly Ala Asn Ala Ser Pro Glu
           260
                                265
                                                    270
Arg Asp Lys Leu Ala Leu Phe Tyr Asn Val Ile Ser Ala Phe Leu
                            280
Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Arg Ala Phe
                        295
Leu Lys Val Thr Gly Trp Gly Gly Ala Thr Glu
                    310
<210> 1577
<211> 309
<212> PRT
<213> Mus musculus
```

```
Met Ala Asn Ser Thr Leu Val Pro Glu Phe Leu Leu Glu Val Phe Ala
                                   10
Glu Thr Trp Glu Leu Arg Ile Leu Leu Thr Val Leu Phe Leu Leu Met
                               25
Tyr Leu Gly Ser Leu Leu Gly Asn Leu Ile Ile Ile Ala Thr Thr
Val Asp His Ile Leu Asn Thr Pro Met Tyr Phe Phe Leu Arg Asn Leu
                       55
Ser Ile Leu Asp Met Gly Tyr Val Ser Val Thr Val Pro Asn Ala Cys
                                       75
Ile Asn Ser Leu Thr Asp His Arg Ser Ile Ser Leu Ala Gly Cys Ala
               85
                                   90
Gly Gln Ile Phe Leu Val Phe Phe Ser Ala Cys Val Glu Ile Gln Phe
                               105
           100
                                                  110
Leu Thr Ile Met Ala Gln Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                          120
Leu Tyr Ala Met Ile Met Asn His Gln Phe Cys Val Gln Met Thr Leu
                                          140
                       135
Ala Ser Leu Leu Thr Ser Leu Ile Leu Ala Ser Val His Thr Ser Lys
                   150
                                       155
Thr Phe Gln Leu Ser Phe Cys His Ser Asn Val Val Ser Gln Phe Phe
               165
                                  170
Cys Asp Ile Pro Ser Leu Leu Arg Leu Ser Cys Thr Asp Thr Phe Ile
                              185
Asn Lys Leu Leu Leu Leu Thr Ala Ile Val Phe Ser Gly Ser Cys
                           200
                                               205
Phe Thr Phe Ile Ala Ile Ser Tyr Val Arg Ile Leu Ser Thr Val Leu
                       215
                                           220
Lys Val Pro Val Lys Gly Glu Arg Gly Lys Ala Phe Ser Thr Cys Val
                   230
                        235
Pro His Ile Ile Val Val Ser Val Phe Leu Ser Ser Gly Ala Tyr Val
               245
                                   250
Tyr Leu Lys Pro Ser Ala Ile Ser Glu Ile Val Glu Asp Met Thr Leu
                               265
Ser Val Phe Tyr Thr Ile Val Pro Pro Phe Leu Asn Pro Ile Ile Tyr
                           280
Ser Leu Arg Asn Lys Gln Ile Lys Lys Ala Val Lys Lys Val Ile Phe
                       295
Arg Phe Phe Ile Val
305
```

```
<210> 1578
<211> 312
<212> PRT
<213> Mus musculus
```

<400> 1578

 Met
 Glu
 Pro
 Ser
 Asn
 Arg
 Thr
 Ala
 Val
 Ser
 Glu
 Phe
 Val
 Leu
 Lys
 Gly

 Phe
 Ser
 Gly
 Tyr
 Pro
 Ala
 Leu
 Glu
 Arg
 Leu
 Leu
 Phe
 Pro
 Leu
 Cys
 Ser

 Val
 Met
 Tyr
 Leu
 Val
 Thr
 Leu
 Leu
 Gly
 Asn
 Thr
 Phe
 Pro
 Leu
 Cys
 Ser

 Ser
 Met
 Leu
 Asp
 Ala
 Arg
 Leu
 His
 Thr
 Pro
 Met
 Tyr
 Phe
 Phe
 Phe
 Leu
 Gly

 Sor
 Met
 Leu
 Asp
 Ala
 Arg
 Leu
 His
 Thr
 Pro
 Met
 Tyr
 Phe
 Phe
 Phe
 Leu
 Gly

 Sor
 Met
 Leu
 Asp
 Ala
 Arg
 Leu
 His
 Thr
 Pro

```
70
                                       75
Met Leu Val His Leu Leu Ser Ser Arg Lys Thr Ile Ser Phe Thr Gly
               85
                                    90
Cys Ala Val Gln Met Cys Leu Ser Leu Ser Thr Gly Ser Thr Glu Cys
                                105
Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Gln
                           120
Pro Leu Arg Tyr Pro Val Leu Met Ser His Arg Leu Cys Leu Met Leu
                       135
                                           140
Ala Gly Ala Ser Trp Val Leu Cys Leu Phe Lys Ser Val Ala Glu Thr
                   150
                                       155
Val Ile Ala Met Arg Leu Pro Phe Cys Gly His His Val Ile Arg His
               165
                                  170
Phe Thr Cys Glu Ile Leu Ala Val Leu Lys Leu Thr Cys Gly Asp Thr
                               185
           180
Ser Val Ser Asp Ala Phe Leu Leu Val Gly Ala Ile Leu Leu Pro
                           200
Ile Pro Leu Thr Leu Ile Cys Leu Ser Tyr Met Leu Ile Leu Ala Thr
                       215
Ile Leu Arg Val Pro Ser Ala Thr Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ala His Leu Ala Val Val Leu Leu Phe Tyr Ser Thr Ile Ile
               245
                                    250
Phe Met Tyr Met Lys Pro Lys Ser Lys Glù Ala Arg Ile Ser Asp Gln
                               265
Val Phe Thr Val Leu Tyr Ala Val Val Thr Pro Met Leu Asn Pro Ile
                           280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Ala Arg Lys Ala
                       295
Trp Gly Ser Arg Trp Ala Cys Arg
305
                   310
```

<211> 319

<212> PRT

<213> Mus musculus

<400> 1579

Met Glu Arg Ser Asn Lys Thr Thr Pro Val Ser Ser Phe Ile Leu Leu 10 Gly Leu Ser Ala His Pro Lys Leu Glu Lys Thr Phe Phe Val Leu Ile 25 Leu Leu Met Tyr Leu Val Ile Leu Leu Gly Asn Val Val Leu Ile Leu 40 45 Val Ser Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Gly Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Thr Ser Ser Val Pro Leu Ile Leu Asp Ser Phe Leu Thr Pro Arg Lys Thr Ile Ser Phe Ser 85 90 Gly Cys Ala Val Gln Met Phe Leu Ser Phe Ala Met Gly Ala Thr Glu 105 Cys Val Leu Leu Gly Met Met Ala Phe Asp Arg Tyr Val Ala Ile Cys 120 125 Asn Pro Leu Arg Tyr Pro Val Val Met Ser Lys Ala Ala Tyr Val Pro 135

```
Met Ala Ala Gly Ser Trp Val Ser Gly Ser Ile Thr Ala Thr Val Gln
                   150
                                      155
Ile Ser Leu Ala Met Thr Leu Pro Phe Cys Gly Asp Asn Val Ile Asn
                                  170
               165
His Phe Thr Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp
                               185
Ile Ser Ile Asn Val Ile Ser Met Ala Val Ala Asn Ala Met Phe Leu
                                              205
       195
                           200
Gly Val Pro Val Leu Phe Ile Phe Val Ser Tyr Ile Phe Ile Leu Ser
                      215
Thr Ile Leu Arg Ile Pro Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser
                230
                                       235
Thr Cys Ser Ala His Leu Thr Val Val Leu Val Phe Tyr Gly Thr Ile
                                   250
                                                      255
               245
Leu Phe Met Tyr Gly Lys Pro Lys Ser Lys Asp Pro Leu Gly Ala Asp
           260
                              265
Lys Gln Asp Leu Ala Asp Lys Leu Ile Ser Leu Phe Tyr Gly Val Val
        275
                           280
                                               285
Thr Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val
                       295
Lys Ala Ala Val Thr Asn Leu Val Gly Gln Lys His Phe Lys Trp
                   310
                                       315
```

<210> 1580 <211> 318 <212> PRT

<213> Mus musculus

<400> 1580

Met Glu Gly Ala Asn Gln Ser Thr Val Ala Glu Phe Val Leu Leu Gly 1.0 Leu Ser Asp His Pro Lys Leu Glu Lys Thr Phe Phe Val Leu Ile Leu 25 Led Met Tyr Leu Val Ile Leu Leu Gly Asn Gly Val Leu Ile Leu Val 40 Ser Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Gly 55 Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Thr Ser Ser Ile Pro Leu 70 7.5 Val Leu Asp Gly Phe Leu Thr Pro Arg Lys Thr Ile Ser Phe Ser Gly 85 90 Cys Ala Val Gln Met Phe Leu Ser Phe Ala Met Gly Ala Thr Glu Cys 100 105 Val Leu Leu Gly Met Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Arg Tyr Pro Val Val Met Asn Lys Ser Ala Tyr Val Pro Met 135 140 Ala Val Ser Ser Trp Val Ala Gly Gly Ala Asn Ser Leu Val Gln Ile 150 155 Ser Leu Ala Val Gln Leu Pro Phe Cys Gly Asp Asn Val Ile Asn His 170 Phe Thr Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Ile 185 190 1.80 Ser Ile Asn Val Ile Ser Met Gly Val Ala Asn Val Ile Phe Leu Gly 200 205 Val Pro Val Leu Phe Ile Phe Val Ser Tyr Ile Phe Ile Leu Ser Thr

210 215 220 Ile Leu Arg Ile Pro Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr 230 235 Cys Ser Ala His Leu Thr Val Val Leu Val Phe Tyr Gly Thr Ile Leu 245 250 Phe Met Tyr Gly Lys Pro Lys Ser Lys Asp Pro Leu Gly Ala Asp Lys 265 Gln Asp Val Ser Asp Lys Leu Ile Ser Leu Phe Tyr Gly Val Leu Thr 280 285 Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys 295 Ala Ala Val Arg Asn Leu Val Gly Gln Lys Cys Leu Ile Gln <210> 1581 <211> 312 <212> PRT <213> Mus musculus <400> 1581 25

Met Asp Glu Glu Asn Cys Ser Thr Val Ala Gln Phe Ile Leu Leu Gly Phe Ser Asp Val Pro Glu Leu Arg Gly Val Leu Ser Leu Leu Phe Leu Leu Ile Tyr Gly Val Thr Ala Leu Ala Asn Leu Gly Met Thr Ala Leu 40 Ile Gln Val Ser Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 His Leu Ser Phe Val Asp Phe Cys Tyr Ser Ser Val Ile Val Pro Lys 70 75 Met Leu Ala Asn Ile Phe Asn Lys Asp Lys Ala Ile Ser Phe Leu Ala 85 90 Cys Met Val Gln Phe Tyr Leu Phe Cys Thr Cys Val Val Thr Glu Val 105 Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Asn 120 125 Pro Leu Leu Tyr Thr Ala Thr Met Ser Ser Asp Leu Arg Met Ile Leu 135 140 Val Ser Gly Cys Tyr Leu Cys Ala Ser Met Cys Ser Leu Ile His Leu 150 155 Cys Leu Ala Leu Glu Ile Pro Ser Phe Lys Ser Asn Val Ile Asn His 170 165 Phe Phe Cys Asp Leu Pro Pro Leu Leu Ser Leu Ala Cys Ser Asp Val 180 185 Thr Val Asn Lys Val Leu Leu Phe Val Val Ala Thr Phe Asn Glu Ser 200 Phe Ser Ile Val Val Ile Phe Thr Ser Tyr Leu Phe Ile Leu Ile Thr Ile Leu Arg Met Arg Ser Val Glu Gly Arg Arg Lys Ala Phe Ser Thr 230 235 Cys Ala Ser His Leu Thr Val Ile Ile Val Phe His Gly Thr Ile Leu 245 250 Ser Ile Tyr Cys Ser Ser Thr Ser Asp Asn Ser Gly Asp Ala Asp Lys 260 265 Val Ala Thr Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu 280

<210> 1582 <211> 321 <212> PRT <213> Mus musculus

<400> 1582

Met Leu Leu Thr Tyr Gly Asn Asn Ser Gly Ala Met Phe Ile Leu Leu 10 Ser Phe Ser Asp Tyr Pro Glu Ile Glu Met Pro Leu Phe Leu Val Phe 25 Leu Ala Ile Tyr Ser Ile Thr Val Val Gly Asn Ile Gly Met Ile Val 40 Ile Ile Arg Ile Asn Pro Lys Leu His Thr Pro Met Tyr Phe Phe Leu 55 Ser His Leu Ser Phe Val Asp Phe Cys Tyr Ser Ser Val Ile Ala Pro 70 75 Lys Met Leu Val Asn Leu Phe Ile Lys Asn Arg Ala Ile Ser Phe Leu Glu Cys Ile Val Gln Tyr Phe Phe Phe Ala Ile Phe Val Val Thr Glu 100 105 110 Thr Ile Leu Leu Val Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys 120 125 Arg Pro Leu Leu Tyr Thr Val Ala Met Ser Gln Lys Leu Cys Ile Ser 135 140 Leu Val Val Gly Ser Tyr Ala Trp Gly Leu Ile Cys Ser Leu Thr Met 150 155 Thr Cys Ser Ile Ile Gln Leu Ser Phe Val Gly Ile Asn Thr Ile Asp 170 His Phe Phe Cys Glu Phe Ser Ser Leu Leu Val Leu Ser Cys Ser Asp 185 180 190 Thr His Val Asn Gln Ile Leu Leu Phe Ser Leu Ser Thr Val Asn Ala 200 Leu Ser Thr Leu Leu Ile Ile Leu Leu Ser Tyr Met Phe Ile Leu Val 215 220 Thr Ile Leu Lys Met Gln Ser Ser Arg Gly Arg Gln Lys Ala Phe Tyr 230 235 Thr Cys Ala Ser His Leu Thr Thr Ile Thr Ile Phe Tyr Gly Thr Ile 250 245 Leu Phe Leu Tyr Ser Val Pro Asn Ser Lys Asn Ser Gln Leu Thr Phe 265 Lys Val Ala Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro 280 Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Thr Val Arg Gln 300 295 Ile Met Lys Ile Lys Phe Ile Ala Leu Pro His Leu Ser Ser Lys Val 305 310 315 Arq

```
<212> PRT
<213> Mus musculus
<400> 1583
Met Asp Glu Glu Asn Ile Thr Glu Val Thr Glu Phe Ile Leu Leu Gly
                                    10
Phe Thr Glu Asp Ala Val Leu Gln Gln Val Leu Phe Phe Ile Phe Leu
                                25
Thr Ile Tyr Ile Ile Ser Leu Leu Gly Asn Ile Thr Leu Ile Ser Leu
                            40
Ile Cys Ala Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Ile Gly
                        55
Asn Leu Ser Phe Leu Asp Leu Trp Tyr Ser Ser Val Tyr Ala Pro Lys
                    70
                                        75
Ile Leu Ile Thr Cys Ile Thr Glu Asp Lys Ser Ile Ser Phe Ala Gly
                85
                                    90
Cys Leu Ala Gln Phe Phe Phe Ser Ala Gly Leu Ala Tyr Ser Glu Cys
            100
                                105
Tyr Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser Asn
                            120
Pro Leu Leu Tyr Phe Gln Ala Met Ser Pro Arg Leu Arg Ala Ser Leu
                        135
Val Ala Ala Ser Tyr Leu Gly Gly Phe Ala Asn Ser Thr Ile Ile Thr
                    150
                                        155
Ser Glu Thr Phe Thr Leu Ser Phe Cys Arg Asp Asn Ile Ile Asp Asp
                165
                                    170
Phe Phe Cys Asp Leu Pro Pro Leu Val Lys Leu Ala Cys Asp Val Lys
                                185
           180
Glu Ser Tyr Gln Ala Val Leu Tyr Phe Ile Leu Ala Ser Asn Val Ile
                            200
Thr Pro Thr Val Leu Ile Leu Ala Ser Tyr Leu Phe Ile Ile Val Ala
                        215
                                            220
Ile Leu Lys Ile Arg Ser Thr Gln Gly Arg Leu Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly Ser Ile Leu
                245
                                    250
Phe Ile Tyr Ser Arg Pro Ser Thr Ser Tyr Ala Leu Glu Arg Asp Lys
                                265
Val Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Met
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Leu Arg Lys Met
    290
                        295
Leu Asp Ile Val
305
<210> 1584
<211> 313
<212> PRT
<213> Mus musculus
<400> 1584
Met Lys Glu His Asn Leu Thr Val Met Thr Glu Phe Ile Leu Met Gly
                                    10
Ile Ser Asp His Ser Glu Leu Gln Ala Pro Leu Phe Gly Leu Phe Leu
            20
                                25
```

<211> 308

```
Ala Ile Tyr Met Thr Ser Met Val Gly Asn Leu Gly Ile Ile Val Leu
                           40
Thr Thr Val Asp Ser Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg
                       55
His Leu Ala Ile Thr Asp Leu Gly Tyr Ser Thr Ala Val Gly Pro Lys
Met Leu Glu Asn Phe Val Val Asp Gln Asn Thr Ile Ser Phe Asn Leu
               85
                                   90
Cys Ala Thr Gln Leu Ala Phe Phe Leu Val Phe Ile Gly Ser Glu Leu
                               105
Phe Ile Leu Ser Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                        120
Pro Leu Leu Tyr Thr Val Leu Met Ser Gln Lys Leu Cys Trp Val Leu
                                          140
                       135
Met Ser Met Pro Tyr Leu Tyr Cys Thr Phe Val Ser Leu Leu Ile Thr
                   150
                                       155
Val Lys Ile Phe Thr Ser Ser Phe Cys Gly Tyr Asn Val Ile Asn His
               165
                                   170
Phe Tyr Cys Asp Cys Ile Pro Leu Leu Ser Leu Leu Cys Ser His Ala
                               185
Glu Glu Ile Ala Phe Ile Val Met Ile Phe Ala Ala Phe Asp Leu Ile
                           200
                                                205
Val Ser Leu Leu Ile Val Leu Val Ser Tyr Met Phe Ile Leu Ile Ala
                       215
                                           220
Val Leu Arg Met Asn Ser Ala Glu Gly Arg Tyr Lys Ala Phe Ser Thr
                  230
                                       235
Cys Gly Ser His Leu Thr Val Val Thr Val Phe Tyr Gly Thr Leu Ile
               245
                                   250
Phe Met Tyr Val Gln Pro Gln Ser Ser His Ser Asp Asp Asn Asp Lys
           260
                               265
Val Ser Ser Ile Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Phe Ala Leu His Arg Thr
                       295
Trp Arg Asn Ile Cys Lys Ile Phe Pro
                   310
```

```
<210> 1585
<211> 313
```

<212> PRT

<213> Mus musculus

<400> 1585

 Met
 Glu
 Lys
 Asn
 Asn
 Leu
 Thr
 Ala
 Val
 Thr
 Gln
 Phe
 Ile
 Leu
 Met
 Gly

 Ile
 Thr
 Glu
 Arg
 Pro
 Glu
 Leu
 Gln
 Ala
 Pro
 Leu
 Phe
 Leu
 Phe
 Gly
 Leu
 Phe
 Leu
 Ala
 Pro
 Leu
 Phe
 Leu
 Ala
 Phe
 Ile
 Ile

```
100
                               105
Phe Ile Leu Ser Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                           120
Pro Leu Leu Tyr Thr Val Ile Met Ser Gln Arg Val Cys Gln Val Leu
                       135
Val Ala Ile Pro Tyr Leu Tyr Cys Thr Phe Val Ser Leu Leu Val Thr
                   150
                                        155
Ile Lys Ile Phe Thr Leu Ser Phe Cys Gly Tyr Asn Val Ile Ser His
               165
                                   170
Phe Tyr Cys Asp Ser Leu Pro Leu Leu Ser Leu Ile Cys Ser Asn Thr
                               185
Asn Glu Ile Glu Met Ile Ile Leu Val Leu Ala Ala Phe Asn Leu Ile
                           200
                                              205
Ser Ser Leu Leu Val Val Leu Val Ser Tyr Leu Phe Ile Leu Ile Ala
                                           220
                       215
Ile Leu Arg Met Asn Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                   230
                                       235
Cys Gly Ser His Leu Thr Val Val Thr Val Phe Tyr Gly Thr Leu Ile
                245
                                    250
Phe Met Tyr Val Gln Pro Gln Ser Ser His Ser Phe Asp Thr Asp Lys
                                265
Val Ala Ser Ile Phe Tyr Thr Leu Ile Ile Pro Met Leu Asn Pro Met
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Tyr Ala Leu Gln Arg Ser
                       295
Leu Lys Lys Ile Tyr Ser Ile Leu Ser
                    310
```

<211> 308

<212> PRT

<213> Mus musculus

<400> 1586

Met Asn Pro Glu Phe Met Leu Val Gly Leu Thr Asp Ser Lys Glu Ile 10 Gln Leu Val Leu Ser Val Leu Phe Leu Leu Ile Tyr Met Leu Thr Val 25 Leu Gly Asn Ile Gly Ile Ile Leu Ile Ile His Leu Asp Val Gln Leu 40 His Thr Pro Met Tyr Phe Phe Leu Thr His Leu Ser Phe Leu Asp Leu 55 Ser Tyr Ser Thr Val Ile Thr Pro Lys Thr Leu Gln Asn Thr Leu Thr 70 75 Ser Ile Lys Asn Ile Ser Phe Met Gly Cys Phe Thr Gln Leu Tyr Phe 90 Phe Ala Phe Leu Ala Gly Ser Glu Cys Phe Ile Leu Ser Ser Met Ala 105 Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu His Tyr Pro Val Ile 115 120 125 Met Ser Pro Arg Arg Ser Tyr Ile Leu Ile Thr Val Ser Tyr Ile Val 135 Gly Ala Ile Asp Ser Ser Ala Thr Val Phe Trp Leu Ser Thr Leu Asp 150 155 Phe Cys Asn Ser Thr Val Ile His His Phe Phe Cys Asp Thr Phe Pro 170

```
Ile Leu Ala Leu Ser Cys Ser Asp Thr Tyr Asn Ala Glu Ala Thr Ile
           180
                               185
Phe Val Leu Ala Gly Ser Thr Leu Leu Ser Leu Ile Thr Ile Ser
                            200
                                               205
Ala Ser Tyr Val Ser Ile Leu Ser Thr Ile Leu Lys Ile Asn Ser Ser
                       215
Ser Gly Lys His Lys Ala Phe Ser Thr Cys Ala Ser His Leu Ile Gly
                   230
                                       235
Val Thr Val Phe Tyr Gly Thr Thr Ile Phe Thr Tyr Leu Lys Pro Ser
               245
                                   250
Thr Ser Tyr Ser Leu Gly Lys Asp Gln Val Ala Pro Val Phe Tyr Thr
           260
                               265
Ile Val Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys
                          280
                                               285
Glu Val Lys Ser Ala Val Val Arg Val Met Lys Lys Arg Glu Cys Ile
                       295
Gln Lys Leu Lys
305
```

<210> 1587 <211> 312 <212> PRT

<213> Mus musculus

<400> 1587

Met Arg Val Trp Asn His Thr Gly Val Lys Glu Phe Met Leu Leu Gly Leu Thr Glu Asn Pro Asn Cys Gln Val Pro Leu Phe Leu Leu Phe Ser 25 Ile Val Tyr Leu Ile Ile Leu Val Gly Asn Trp Gly Met Ile Ile Leu Ile Trp Leu Asn Ala His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 Asn Leu Ser Phe Cys Asp Ile Cys Tyr Ser Thr Val Ile Ala Pro Lys 75 Met Leu Ile Asp Phe Leu Ser Glu His Lys Ser Ser Thr Phe Phe Gly 8.5 90 Cys Val Leu Gln Ser Phe Phe Phe Ala Val Tyr Ile Thr Thr Glu Gly 105 Ile Leu Leu Ser Met Met Ala Tyr Asp Arg Tyr Val Ala Ile Ala Asn 120 Pro Leu Met Tyr Thr Val Ile Met Thr His Arg Ile Cys Ser Gln Met 135 140 Val Leu Ala Cys Tyr Leu Gly Gly Leu Ile Asn Ser Leu Thr His Thr 150 155 Ile Gly Leu Leu Arg Leu Asp Phe Cys Gly Pro Asn Ile Val Asn His 165 170 Phe Phe Cys Asp Ile Pro Pro Leu Leu Lys Leu Ala Cys Ser Asp Ala 185 His Ile Asn Glu Met Leu Leu Val Phe Ser Gly Val Ile Ala Ile 200 205 Phe Thr Phe Ile Ile Val Met Val Ser Tyr Ile His Ile Ile Ile Ala 215 220 Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr 230 235 Cys Ala Ser His Leu Thr Ala Val Ile Leu Phe Tyr Gly Ser Val Thr

```
250
                245
Phe Ser Tyr Ile Gln Pro Ser Ser Gln Tyr Ser Met Glu Gln Glu Lys
                               265
Val Ser Ala Val Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Ala Lys Lys Phe
                        295
Ile Gly Arg Glu Arg Arg Thr Ser
<210> 1588
<211> 315
<212> PRT
<213> Mus musculus
<400> 1588
Met Ser Ala Cys Asn His Thr Asn Glu Pro Glu Phe Thr Leu Val Gly
Leu Thr Asp Ser Lys Glu Ile Gln Leu Val Leu Ser Val Leu Phe Leu
                                25
Leu Ile Tyr Met Leu Thr Val Leu Gly Asn Ile Gly Met Ile Leu Ile
                            40
Ile His Leu Asp Val Gln Leu His Thr Pro Met Tyr Phe Phe Leu Thr
                        55
His Leu Ser Phe Leu Asp Leu Ser Tyr Ser Thr Val Ile Thr Pro Lys
                   70
                                        75
Thr Leu Gln Asn Thr Leu Thr Ser Ile Lys Asn Ile Ser Phe Met Gly
               85
                                    90
Cys Phe Thr Gln Leu Tyr Phe Phe Val Leu Leu Ala Ala Ser Glu Cys
                                105
Phe Ile Leu Ser Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu His Tyr Pro Val Ile Met Ser Pro Arg Arg Ser Tyr Thr Leu
                        135
Ile Thr Val Ser Tyr Met Ile Gly Val Leu Asp Ser Ser Val Thr Val
                    150
                                        155
Phe Cys Leu Ser Thr Leu Asp Phe Cys Asn Ser Lys Val Ile His His
               165
                                    170
Phe Phe Cys Asp Thr Phe Pro Ile Leu Ala Leu Ser Cys Ser Asp Thr
           180
                                185
Tyr Asn Ala Glu Ala Thr Ile Phe Val Leu Ala Gly Ser Thr Leu Leu
                            200
                                                205
Leu Ser Leu Ile Thr Ile Ser Ser Ser Tyr Val Ser Ile Leu Ser Thr
                        215
                                            220
Ile Leu Lys Ile Asn Ser Ser Ser Gly Lys His Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Ile Gly Val Thr Val Phe Tyr Gly Thr Met Ile
                245
                                    250
Phe Thr Tyr Leu Lys Pro Ser Thr Ser Tyr Ser Leu Gly Lys Asp Gln
                                265
                                                    270
Val Ala Ser Val Phe Tyr Thr Ile Val Ile Pro Met Leu Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Val Val Arg Val
                       295
Met Lys Lys Arg Glu Cys Ile Gln Lys Leu Glu
```

310

```
<210> 1589
<211> 313
<212> PRT
<213> Mus musculus
<400> 1589
Met Glu Lys Ala Val Leu Ile Asn Gln Thr Ser Val Met Ser Phe Arg
Leu Thr Gly Leu Ser Thr Asn Pro Lys Val Gln Met Ala Ile Phe Phe
                                25
Ile Phe Leu Ile Phe Tyr Val Leu Thr Leu Val Gly Asn Ile Leu Ile
                            40
                                                45
Val Val Thr Ile Ile His Asp His Arg Leu His Thr Pro Met Tyr Phe
                        55
Phe Leu Ser Asn Leu Ser Phe Ile Asp Val Cys His Ser Thr Val Thr
                    70
                                        75
Val Pro Lys Met Leu Ser Asp Thr Phe Ser Glu Glu Lys Leu Ile Ser
                                    90
Phe Asp Asp Cys Val Val Gln Ile Phe Phe Leu His Leu Phe Ala Cys
                                105
            100
Thr Glu Ile Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala
                            120
Ile Cys Lys Pro Leu Arg Tyr Met Thr Ile Met Asn Trp Lys Val Cys
                        135
                                            140
Met Val Leu Gly Gly Ala Met Trp Thr Ala Gly Thr Ile His Ser Ile
                   150
                                        155
Ser Phe Thr Ser Leu Thr Ile Lys Leu Pro Tyr Cys Gly Pro Asn Glu
                165
                                   170
Leu Asp Ser Phe Phe Cys Asp Val Pro Gln Val Ile Glu Leu Ala Cys
                                185
Thr Asp Thr Arg Ile Thr Glu Ile Leu Val Val Ser Asn Ser Gly Met
                            200
        195
Ile Ser Met Val Cys Phe Val Ile Ile Val Val Ser Tyr Ala Val Ile
                        215
                                            220
Leu Val Ser Leu Arg Gln Gln Ile Ser Asp Gly Lys Arg Lys Ala Leu
                    230
                                        235
Ser Thr Cys Ala Ala His Leu Thr Val Val Thr Leu Phe Leu Gly His
                                    250
                245
Cys Ile Phe Ile Tyr Ser Arg Pro Ala Ile Ser Leu Pro Glu Asp Lys
                                265
Ile Val Ser Ala Phe Phe Thr Ala Ile Thr Pro Leu Leu Asn Pro Ile
                            280
                                                285
Ile Tyr Thr Phe Arg Asn Glu Asp Met Lys Ser Ala Leu Lys Lys Leu
                        295
Ile Arg Arg Lys Glu Gly Lys Glu Lys
305
                    310
<210> 1590
<211> 318
<212> PRT
<213> Mus musculus
```

Met Ala Thr Ser Ser Thr Thr Leu Asn Tyr Thr Asn Val Arg Asp Ile

<400> 1590

```
10
Trp Tyr Thr Met Ile Gly Ile Pro Gly Leu Glu Tyr Ala His Ile Trp
                               25
Ile Ser Ile Pro Ile Cys Ser Met Tyr Ile Val Ala Ile Ala Gly Asn
Ala Leu Leu Phe Leu Ile Ile Thr Glu Arg Ser Leu His Glu Pro
                       55
Met Tyr Leu Phe Leu Ser Met Leu Ala Leu Ala Asp Ile Phe Leu Ser
                   70
                                       75
Thr Val Thr Thr Pro Lys Met Leu Ala Ile Phe Trp Phe Arg Ala Gly
                                   90
               85
Gly Ile Ser Phe Ala Ser Cys Val Ser Gln Met Phe Phe Leu His Phe
                               105
Ile Phe Val Ala Glu Ser Ala Ile Leu Leu Ala Met Ala Phe Asp Arg
                           120
                                               125
Tyr Val Ala Ile Cys Tyr Pro Leu Arg Tyr Thr Thr Ile Leu Thr Thr
                       135
Ser Val Ile Ile Lys Met Gly Ile Ala Ala Val Ile Arg Ser Phe Phe
                   150
                                        155
Ile Cys Phe Pro Leu Ile Phe Leu Val Tyr Arg Leu Thr Tyr Cys Gly
               165
                                    170
Lys Ser Thr Ile Arg His Ser Tyr Cys Glu His Met Gly Ile Ala Arg
           180
                               185
Leu Ala Cys Asp Ser Ile Lys Val Asn Ile Tyr Tyr Gly Val Ile Val
                           200
Ala Leu Phe Ser Thr Cys Leu Asp Ala Val Leu Ile Ile Val Ser Tyr
                       215 -
                                            220
Ala Leu Ile Leu Cys Ala Val Phe Arg Ile Pro Ser Arg Asp Ala Arg
                   230
                                        235
Leu Lys Ala Leu Gly Thr Cys Gly Ser His Val Cys Val Ile Leu Leu
               245
                                   250
Phe Tyr Thr Pro Ala Phe Phe Ser Phe Phe Ala His Arg Phe Gly Gly
                               265
           260
His Ser Ile Pro Leu His Val His Ile Leu Leu Ala Asn Leu Tyr Val
                           280
Val Val Pro Pro Ser Val Asn Pro Ile Ile Tyr Gly Val Lys Thr Lys
                       295
Gln Ile Gln Glu Arg Val Ile Gln Val Phe Ser Leu Gly Lys
                   310
```

<211> 316 <212> PRT

<213> Mus musculus

<400> 1591

 Met
 Leu
 Gly
 Trp
 Ser
 Asn
 Gly
 Thr
 Tyr
 Asn
 Glu
 Ser
 Tyr
 Thr
 Ser
 Phe
 10
 10
 10
 10
 15
 Thr
 Ser
 Phe
 15
 15
 15
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 10
 <t

```
Val Leu Pro Pro Met Leu Phe Ser Phe Ser Thr Arg Phe Asn Arg Ile
                                   90
Ser Leu Pro Arg Cys Leu Gly Gln Met Phe Cys Ile Tyr Phe Leu Val
           100
                               105
Ser Met Asp Cys Asn Ile Leu Leu Val Met Ala Leu Asp Arg Tyr Val
                           120
Ala Ile Cys Tyr Pro Leu Arg Tyr Pro Glu Ile Val Thr Gly Gln Leu
                       135
Leu Ala Gly Leu Val Val Leu Ala Val Thr Arg Ser Thr Ser Ile Val
                   150
                                       155
Ala Pro Val Val Val Leu Ala Ser Arg Val Arg Phe Cys Arg Ser Asp
               165
                                   170
Val Ile Arg His Phe Ala Cys Glu His Met Ala Leu Met Lys Leu Ser
           180
                               185
Cys Gly Asp Ile Ser Leu Asn Lys Thr Ala Gly Leu Ile Ile Arg Thr
                           200
Phe Asn Arg Val Leu Asp Met Leu Leu Gly Thr Ser Tyr Ser Arg
                       215
Ile Ile His Ala Ala Phe Arg Ile Ser Ser Gly Gly Ala Arg Ser Lys
                   230
                                       235
Ala Leu Asn Thr Cys Gly Ser His Leu Leu Val Ile Phe Thr Val Tyr
                                   250
               245
Ser Ser Thr Met Ser Ser Ser Ile Val Tyr Arg Val Ala Arg Thr Ala
                               265
Ser Gln Asp Val His Asn Leu Leu Ser Ala Phe Tyr Leu Leu Pro
                           280
                                              285
Cys Leu Val Asn Pro Ile Ile Tyr Gly Ala Arg Thr Lys Glu Ile Arg
                       295
Gln His Leu Val Arg Ser Phe Leu Ser Ala Gly Pro
                   310
```

<211> 319

<212> PRT

<213> Mus musculus

<400> 1592

Met Glu Met Thr Asn Asp Ser Met Leu Thr Glu Phe Leu Leu Val Gly 10 Leu Ser Asp His Pro Lys Leu Gln Thr Val Leu Phe Val Leu Val Leu 25 Cys Met Tyr Leu Met Ile Leu Leu Gly Asn Gly Val Leu Ile Ala Val 40 Val Ile His Asp Ile Arg Leu His Thr Pro Met Tyr Phe Phe Leu Cys 55 60 Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Ser Ser Ser Val Pro Leu 75 Ile Leu Ser Ser Phe Leu Thr Val Arg Lys Arg Val Ser Phe Ser Glu 8.5 90 Cys Met Ile Gln Met Phe Phe Ser Phe Ala Met Gly Ala Thr Glu Cys 105 Val Leu Leu Gly Thr Met Ala Leu Asp Arg Phe Met Ala Ile Cys Tyr 120 125 Pro Leu Arg Tyr Pro Val Ile Met Ser Lys Asp Thr Tyr Val Pro Met 135 Ala Ala Gly Cys Trp Val Ala Gly Leu Val Asp Ser Val Val Gln Thr

```
150
145
                                      155
Ser Leu Ala Val Gln Leu Pro Phe Cys Thr Asn Asn Val Ile His His
               165
                                   170
Phe Val Cys Glu Ile Leu Gly Ile Leu Glu Leu Ala Cys Ala Asp Ile
           180
                               185
Ser Ile Asn Val Ile Ser Leu Thr Gly Ser Asn Leu Leu Phe Leu Ala
Val Pro Leu Leu Val Ile Ala Val Ser Tyr Met Phe Ile Ile Ala Thr
                       215
                                            220
Ile Leu Arg Ile Pro Ser Ala Glu Gly Lys Arg Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ser Ala His Leu Thr Val Val Ile Ile Phe Tyr Gly Thr Ile Phe
               245
                                   250
Ser Met Tyr Ala Lys Pro Lys Ser Lys Asp Thr Ala Gly Ala Gly His
           260
                               265
Gln Ser Val Met Glu Ala Leu Ile Ser Leu Phe Tyr Gly Val Met Thr
                           280
Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys
                       295
Ala Ala Val Gln Asn Met Leu Gly Arg Lys Thr Leu Ser Lys Met
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1593

Met Lys Phe Thr Glu Ile Arg Ala Glu Asp Asn Ala Ser Thr Val Thr 10 Glu Phe Leu Leu Gly Phe Ser Asp Leu Pro Asn Leu Gln Gly Ile 20 25 Leu Phe Gly Met Phe Ser Ile Ile Tyr Leu Ile Ile Leu Val Gly Asn 40 Ser Phe Ile Ile Val Ile Thr Arg Ile Asp Pro Ala Leu Gln Lys Pro 55 60 Met Tyr Phe Phe Leu Ala Asn Phe Ser Ser Leu Glu Ile Cys Tyr Val 70 75 Ser Val Thr Leu Pro Arg Ile Leu Phe Ser Ile Ala Thr Gln Glu Arg 85 90 Lys Ile Ser Val Leu Ser Cys Ala Thr Gln Leu Cys Phe Phe Leu Met 100 105 110 Leu Ala Ala Thr Glu Cys Phe Leu Leu Ala Val Met Ser Tyr Asp Arg 120 125 Tyr Val Ala Ile Cys Asn Pro Leu His Tyr Pro Leu Val Met Asn Pro 135 Thr Lys Cys Thr Gln Leu Ala Ala Ser Trp Leu Gly Gly Ile Pro 155 Val Gln Ile Gly Gln Thr Cys Gln Ile Phe Ser Leu His Phe Cys Asn 165 170 Ser Thr Gln Ile Asn His Phe Leu Cys Asp Ile Pro Pro Ile Leu Lys 185 Leu Ala Cys Gly Asp Thr Ser Ile Asn Glu Leu Ser Val Tyr Leu Val 200 Ala Ile Leu Phe Ala Ala Val Pro Phe Met Leu Ile Leu Ala Ser Tyr 210 215 220

```
Gly Lys Ile Ile Ala Thr Ile Leu Lys Leu Pro Thr Ala Thr Gly Arg
                    230
                                        235
Ala Lys Ala Phe Ser Thr Cys Ser Ser His Leu Leu Val Val Phe Leu
                245
                                    250
Phe Phe Gly Ser Ala Thr Ile Thr Tyr Leu Arg Pro Lys Ser Thr His
                                265
Ser Pro Gly Thr Asp Lys Leu Phe Ser Leu Phe Tyr Ser Ile Val Thr
                                               285
                            280
Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile
                       295
Ala Ala Leu Arg Lys Leu Leu Arg Ile Lys
                    310
```

<210> 1594 <211> 314 <212> PRT <213> Mus musculus

<400> 1594

Met Lys Phe Thr Glu Ile Arg Ala Glu Asp Asn Ala Ser Thr Gly Thr 10 Glu Phe Leu Leu Gly Phe Ser Asp Leu Pro Asn Leu Gln Glu Ile 25 Leu Phe Gly Leu Phe Ser Ile Ile Tyr Leu Ile Ile Leu Ile Gly Asn 40 Ser Phe Ile Ile Val Ile Thr Arg Ile Asp Pro Ala Leu Gln Lys Pro 55 Met Tyr Phe Phe Leu Ala Asn Phe Ser Ser Leu Glu Ile Cys Tyr Val 70 75 Ser Val Thr Leu Pro Arg Ile Leu Phe Asn Ile Ala Thr Gln Asp Arg Ser Ile Ser Val Val Ser Cys Ala Thr Gln Met Cys Phe Phe Leu Met 105 Leu Gly Ala Thr Glu Cys Phe Leu Leu Ala Val Met Ser Tyr Asp Arg 120 115 125 Tyr Val Ala Ile Cys Asn Pro Leu His Tyr Pro Leu Val Met Asn Pro 135 Thr Lys Cys Thr Gln Leu Ala Ala Ser Trp Leu Gly Gly Ile Pro 150 155 Val Gln Ile Gly Gln Thr Cys Gln Ile Phe Ser Leu His Phe Cys Asn 170 165 Ser Asn Gln Ile Asp His Phe Phe Cys Asp Leu Pro Pro Ile Leu Lys 180 185 190 Leu Ala Cys Gly Asp Thr Ser Ile His Glu Leu Ser Val Tyr Leu Val 200 Ala Met Leu Phe Val Ala Phe Pro Phe Leu Leu Ile Leu Ala Ser Tyr 215 Thr Lys Ile Ile Ala Thr Ile Leu Lys Leu Pro Thr Ala Thr Gly Arg 230 235 Ala Lys Ala Phe Ser Thr Cys Ser Ser His Leu Leu Val Val Phe Leu 250 Phe Phe Gly Ser Ala Thr Ile Thr Tyr Leu Arg Pro Lys Ser Thr His 265 270 260 Ser Pro Gly Thr Asp Lys Leu Leu Ser Leu Phe Tyr Thr Ile Val Thr 280 Pro Met Phe Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile

295 290 300 Ala Ala Leu Arg Lys Leu Leu His Ile Lys 310 <210> 1595 <211> 308 <212> PRT <213> Mus musculus <400> 1595 Met Glu Lys Lys Asn Cys Ser Ser Val Asp Glu Phe Ile Phe Leu Gly Ile Thr Lys Asn Pro Asp Met Arg Val Thr Phe Phe Thr Thr Leu Leu 25 Leu Val Tyr Leu Ile Asn Leu Leu Ala Asn Leu Gly Met Ile Ile Leu Ile Arg Val Asn Thr Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 His Leu Ser Phe Cys Asp Leu Cys Tyr Ser Thr Ala Ile Gly Pro Lys Met Leu Val Asp Leu Leu Val Glu Glu Lys Ser Ile Pro Ile Val Gly 85 90 Cys Ala Leu Gln Phe Phe Thr Phe Cys Ile Phe Ala Asp Ser Glu Cys 105 Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Gln Ala Ile Ser Asn 120 Pro Leu Leu Tyr Thr Val Asn Met Ser Ser Arg Leu Cys Ser Leu Leu 135 140 Met Ala Gly Val Tyr Leu Val Gly Thr Ala Asp Ala Leu Ile His Thr 155 Thr Leu Thr Phe Arg Leu Cys Phe Cys Gly Ser Asn Glu Ile Asn His 165 170 Phe Phe Cys Asp Val Pro Pro Leu Leu Leu Ile Ser Cys Ser Asp Thr 185 Glu Val Asn Glu Leu Ala Ile Phe Thr Ile Phe Gly Phe Ile Glu Leu 200 205 Ser Thr Ile Ser Gly Val Leu Val Ser Tyr Cys Tyr Ile Ile Ser Ser 215 Val Leu Lys Ile Gly Ser Ala Glu Gly Arg Phe Lys Ala Phe Ser Thr 230 235 Cys Ala Ser His Leu Thr Ala Val Ala Val Phe Gln Gly Thr Met Leu 250 245 Phe Met Tyr Phe Arg Pro Ser Ser Ala Tyr Ser Leu Asp Gln Asp Lys 265 Met Thr Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Val Val Lys Leu 295 Lys Asn Lys Trp 305 <210> 1596 <211> 314 <212> PRT <213> Mus musculus

```
<400> 1596
Met Glu Asn Ser Thr Ser Val Asp Glu Phe Leu Leu Gly Leu Thr
Ser Val Gln Lys Leu Gln Pro Ile Ile Phe Val Met Phe Leu Thr Ile
Tyr Leu Leu Asn Leu Val Gly Asn Gly Val Ile Leu Met Ile Val Thr
                            40
Leu Glu Arg Arg Leu His Ser Pro Met Tyr Phe Phe Leu Gly Asn Leu
                        55
Ser Cys Leu Asp Ile Cys Tyr Ser Ser Val Thr Leu Pro Lys Val Leu
                    70
                                        75
Ile Asn Leu Leu Ser Arg Arg Ala Ile Ser Phe Leu Gly Cys Ile
               85
                                    90
Thr Gln Leu Tyr Phe Phe His Phe Leu Gly Ser Thr Glu Ala Ile Leu
                               105
Leu Ala Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys Ser Pro Leu
                            120
Arg Tyr Thr Ala Ile Met Asn Pro Gln Leu Cys Ile Leu Leu Ala Ala
    130
                        135
                                            140
Thr Ala Trp Phe Thr Ser Phe Phe Tyr Ala Leu Leu His Ser Val Met
                   150
                                        155
Thr Ala His Leu Asn Phe Cys His Ser His Lys Leu Ser His Phe Phe
                                    170
               165
Cys Asp Val Lys Pro Leu Leu Glu Val Ala Cys Gly Asn Thr Val Leu
           180
                                185
                                                    190
Asn Gln Trp Leu Leu Ser Val Val Thr Gly Ser Ile Ser Met Gly Ala
       195
                            200
                                                205
Phe Leu Leu Ile Leu Leu Ser Tyr Phe Tyr Ile Ile Ala Phe Leu Leu
                       215
                                            220
Phe Lys Asn Arg Ser Cys Arg Met Leu Lys Lys Ala Leu Ser Thr Cys
                                        235
                    230
Thr Ser His Phe Met Val Val Cys Leu Phe Tyr Gly Pro Val Gly Phe
                245
                                    250
Thr Tyr Ile Arg Pro Ala Thr Ala Ser Ala Ser Ser Met Ser Glu Asp
            260
                                265
                                                    270
Arg Val Val Ala Ile Ile Tyr Ser Ala Val Thr Pro Val Leu Asn Pro
                            280
Leu Ile Tyr Thr Leu Arg Asn Lys Glu Val Met Leu Ala Leu Lys Lys
                        295
                                            300
Asn Phe Gly Lys Lys Leu Phe Lys Gly Asn
                    310
<210> 1597
```

```
<210> 1597
<211> 308
<212> PRT
<213> Mus musculus
```

<400> 1597

 Met Ser Asn Gln Thr Ser Val Thr Glu Phe Leu Leu Leu Gly Val Thr

 1
 5
 10
 15

 Asp Ile Gln Glu Leu Asn Pro Ile Leu Phe Val Ile Phe Phe Thr Ile
 20
 25
 30

 Tyr Phe Ile Asn Ile Thr Gly Asn Gly Ala Ile Leu Met Ile Val Ile
 35
 40
 45

 Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu Gly Asn Leu

```
Ala Cys Leu Asp Ile Ser Tyr Ser Thr Val Thr Val Pro Lys Leu Leu
                                       75
Gln Asn Leu Leu Ser Thr Ser Lys Ala Ile Ser Phe Leu Gly Cys Ile
                                   90
Thr Gln Leu His Phe Phe His Phe Leu Gly Ser Thr Glu Thr Met Leu
                               105
Leu Pro Val Met Ala Phe Asp Arq Phe Val Ala Ile Cys Arq Pro Leu
                           120
His Tyr Ser Val Ile Met Asn His Gln Leu Cys Ile His Met Thr Val
                       135
                                           140
Thr Ile Trp Thr Leu Gly Phe Phe His Ala Leu Leu His Ser Val Met
                   150
                                       155
Thr Ser Arg Leu Ser Phe Cys Gly Pro Asn His Val His His Phe Phe
               165
                                   170
Cys Asp Ile Lys Pro Leu Leu Asp Leu Ala Cys Gly Asn Thr Glu Leu
                               185
Asn Leu Trp Leu Leu Asn Thr Val Thr Gly Thr Ile Ala Leu Thr Ser
       195
                            200
Phe Phe Leu Ile Phe Leu Ser Tyr Phe Tyr Ile Ile Thr Asn Leu Leu
                       215
                                            220
Leu Lys Thr Arg Ser Cys Ser Met Leu His Lys Ala Leu Ser Thr Cys
      230
                                       235
Ala Ser His Phe Met Val Val Val Leu Phe Tyr Ala Pro Val Leu Phe
               245
                                   250
Thr Tyr Ile Arg Pro Ala Ser Gly Ser Ser Leu Asp Gln Asp Thr Ile
                               265
Ile Ala Ile Met Tyr Ser Val Val Thr Pro Ala Leu Asn Pro Leu Ile
                           280
                                               285
Tyr Thr Leu Arg Asn Lys Glu Val Arg Ser Ala Leu Asn Arg Lys Val
                       295
Arg Arg Trp Leu
305
<210> 1598
<211> 313
<212> PRT
<213> Mus musculus
<400> 1598
Met Leu Asn Gln Thr Ser Val Thr Glu Phe Ile Leu Leu Gly Val Arg
                                   1.0
Asp Ile Gln Glu Pro Gln Pro Phe Leu Phe Ala Ile Phe Phe Thr Ile
                               25
Tyr Phe Val Asn Ile Thr Gly Asn Gly Ala Ile Leu Met Ile Val Ile
Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu Gly Asn Leu
Ala Cys Leu Asp Ile Ser Tyr Ser Thr Val Thr Val Pro Lys Met Leu
```

Glu Asn Leu Leu Ser Thr Asn Lys Ala Ile Ser Leu Leu Gly Cys Ile

Thr Gln Leu His Phe Phe His Phe Leu Gly Thr Thr Glu Ser Leu Leu 100 105 110 Leu Ala Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys Arg Pro Leu

120

75

125

90

70

85

115

55

60

```
His Tyr Ser Val Ile Met Asn Trp Gln Val Cys Ile Leu Met Ala Val
                        135
Thr Ile Trp Thr Ile Ala Phe Leu His Ala Leu Leu His Ser Val Met
                    150
                                        155
Thr Ser Arg Leu Ser Phe Cys Gly Leu Asn His Ile His His Phe Phe
                165
                                    170
Cys Asp Val Lys Pro Leu Leu Glu Leu Ala Cys Gly Asn Thr Glu Leu
           180
                                185
Asn Leu Trp Leu Leu Asn Thr Val Thr Gly Thr Ile Ala Ser Val Pro
                            200
                                                205
Phe Phe Leu Thr Phe Leu Ser Tyr Phe Tyr Ile Ile Thr Tyr Leu Phe
                       215
Leu Lys Thr Arg Ser Cys Ser Met Leu His Lys Ala Leu Ser Thr Cys
                   230
                                        235
Ala Ser His Phe Met Val Val Val Leu Phe Tyr Ala Pro Val Leu Phe
                                    250
Thr Tyr Ile Arg Pro Thr Ser Gly Ser Ser Leu Asp Gln Asp Arg Ile
            260
                                265
Ile Ala Ile Met Tyr Ser Val Val Thr Pro Ala Leu Asn Pro Leu Ile
                            280
Tyr Thr Leu Arg Asn Lys Glu Val Arg Ser Ala Leu Asn Arg Lys Val
                       295
                                            300
Arg Arg Cys Leu Leu Leu Glu Glu Ile
                    310
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1599

Met Ala Leu Ile Asn Lys Ser His Pro Glu Glu Phe Ile Leu Leu Gly Phe Ala Asp Arg Pro Trp Leu Glu Leu Pro Leu Phe Ile Ile Leu Leu 25 Val Thr Tyr Pro Thr Ala Met Ile Gly Asn Ile Ala Ile Ile Leu Val 40 Ser Ile Leu Asp Pro Cys Leu His Ser Pro Met Tyr Phe Phe Leu Thr 55 Asn Leu Ser Phe Leu Asp Met Cys Tyr Thr Thr Ser Ile Val Pro Gln 70 75 Met Leu Thr Asn Leu Gly Ser Ser Thr Lys Thr Ile Ser Tyr Met Arg 85 90 Cys Val Val Gln Leu Tyr Phe Phe His Ile Met Gly Gly Thr Glu Cys 105 Val Leu Leu Ala Leu Met Ser Phe Asp Arg Tyr Val Ala Ile Cys Lys 120 Pro Leu His Tyr Thr Leu Ile Met Asn Gln Arg Asn Cys Ile Leu Leu 135 140 Val Ser Thr Val Trp Leu Thr Gly Ile Ser Tyr Ala Val Ser Glu Ala 150 155 Thr Val Thr Leu Gln Leu Pro Leu Cys Gly His Asn Lys Leu Asp His 165 170 Leu Val Cys Glu Ile Pro Ile Leu Ile Lys Thr Ala Cys Gly Glu Lys 185 Glu Thr Asn Glu Leu Ala Leu Ser Val Val Cys Ile Phe Leu Leu Ala

```
195
                          200
Val Pro Leu Cys Leu Ile Leu Ala Ser Tyr Ala Ser Ile Gly His Ala
                     215
                                         220
Val Phe Lys Ile Lys Ser Ser Glu Gly Arg Lys Lys Ala Phe Gly Thr
                  230
                                      235
Cys Ser Ser His Leu Ile Val Val Leu Leu Phe Tyr Gly Pro Ala Ile
                                  250
Ser Met Tyr Leu Gln Pro Pro Ser Ser Ile Thr Lys Asp Gln Pro Lys
                              265
Phe Met Ala Leu Phe Tyr Gly Val Val Thr Pro Thr Leu Asn Pro Phe
                         280
                                             285
Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Gly Asn Leu
           295
Phe Lys Asn Ile Phe Met Ser Lys
305 . 310
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1600 Met Ile Leu Ile Asn Lys Ser His Pro Glu Glu Phe Ile Leu Leu Gly 10 Phe Ala Asp Arg Pro Trp Leu Glu Leu Pro Leu Phe Ile Ile Leu Leu 25 Val Thr Tyr Pro Thr Ala Met Ile Gly Asn Ile Ala Ile Ile Leu Val 40 45 Ser Ile Leu Asp Pro Cys Leu His Ser Pro Met Tyr Phe Phe Leu Thr 55 60 Asn Leu Ser Phe Leu Asp Met Cys Tyr Thr Thr Ser Ile Val Pro Gln 75 Met Leu Ile Asn Leu Trp Gly Ser Thr Lys Thr Ile Ser Tyr Met Arg 90 Cys Ala Val Gln Leu Tyr Phe Phe His Thr Met Gly Gly Thr Glu Cys 105 Val Leu Leu Ala Leu Met Ser Phe Asp Arg Tyr Val Ala Ile Cys Lys 120 Pro Leu His Tyr Thr Leu Ile Met Asn Gln Arg Asn Cys Val Leu Leu 135 140 Val Ser Thr Val Trp Leu Thr Gly Ile Phe Tyr Ala Val Ser Glu Ala 150 155 Thr Val Thr Leu Gln Leu Pro Leu Cys Gly His Asn Lys Met Asp His 170 165 Leu Val Cys Glu Ile Pro Ile Leu Ile Lys Thr Ala Cys Gly Glu Lys 185 Glu Thr Asn Glu Leu Ala Leu Ser Val Val Cys Ile Phe Leu Leu Ala 200 Ile Pro Leu Cys Leu Ile Leu Ala Ser Tyr Ala Ser Ile Gly His Ala 215 220 Val Phe Lys Ile Lys Ser Ser Glu Gly Arg Lys Lys Ala Phe Gly Thr 230 235 Cys Ser Ser His Leu Ile Val Val Leu Leu Phe Tyr Gly Pro Ala Ile 245 250 Ser Met Tyr Leu Gln Pro Pro Ser Ser Ile Thr Lys Asp Gln Pro Lys 265

Phe Met Ala Leu Phe Tyr Gly Val Val Thr Pro Thr Leu Asn Pro Phe 280 Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Gly Lys Leu 295 Phe Arg Asn Ile Phe Ile Ser Lys

<210> 1601 <211> 314 <212> PRT <213> Mus musculus

<400> 1601

Met Asp Asp Met Thr Ser Gly Asn Tyr Cys Thr Val Thr Glu Phe Phe 10 Leu Ala Gly Leu Ser Glu Lys Pro Glu Leu Gln Leu Pro Leu Phe Phe 25 Leu Phe Ile Gly Ile Tyr Met Ile Thr Val Ala Gly Asn Leu Gly Met Ile Ile Leu Ile Gly Leu Ser Ser His Leu His Thr Pro Met Tyr Tyr 55 Phe Leu Ser Ser Leu Ser Phe Ile Asp Phe Cys Gln Ser Thr Val Val 7.5 Thr Pro Lys Met Leu Val Asn Phe Val Thr Glu Lys Asn Ile Ile Ser 90 85 Tyr Pro Gly Cys Met Thr Gln Leu Tyr Phe Phe Leu Ile Phe Ala Ile 100 105 Ala Glu Cys Tyr Ile Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala 120 125 Ile Cys Asn Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Ile Tyr 135 Ile Ser Leu Ile Ser Gly Val Tyr Ile Ile Gly Val Ile Cys Ala Ser 155 150 Ala His Thr Gly Phe Met Val Arg Ile Arg Phe Cys Lys Leu Asp Val 170 165 Ile Asn His Tyr Phe Cys Asp Leu Leu Pro Leu Leu Lys Leu Ala Cys 185 Ser Asn Thr Tyr Ile Asn Glu Met Leu Ile Leu Phe Phe Gly Thr Leu 200 205 Asn Ile Phe Val Pro Ile Leu Thr Ile Ile Thr Ser Tyr Ile Phe Ile 215 220 Ile Ala Ser Ile Leu Arg Ile Arg Ser Thr Glu Gly Arg Ser Lys Ala 235 230 Phe Ser Thr Cys Ser Ser His Ile Leu Ala Val Ala Val Phe Phe Gly 250 245 Ser Leu Ala Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp 260 265 Gln Gly Lys Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Leu 275 280 Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Ala Val Ala Leu 295 300 Lys Lys Ile Ile Glu Arg Lys Thr Phe Met 310

```
<213> Mus musculus
<400> 1602
Met Ala Ala Gly Asn Arg Cys Thr Val Thr Glu Phe Phe Leu Val Gly
                                    10
Leu Ser Glu Lys Ser Glu Leu Gln Leu Pro Leu Phe Leu Leu Phe Thr
                               25
Gly Ile Tyr Leu Ile Thr Val Ala Gly Asn Leu Gly Met Ile Thr Leu
                           40
Ile Gly Leu Ser Ser His Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
                       55
Ser Leu Ser Phe Ile Asp Phe Cys Gln Ser Thr Val Val Ile Pro Lys
                   70
                                       75
Met Leu Met Ser Phe Leu Thr Glu Lys Asn Ile Ile Ser Tyr Ser Gly
Cys Met Ala Gln Leu Tyr Phe Phe Leu Ile Phe Gly Ile Ala Glu Cys
                                105
Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                           120
Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Ile Tyr Ser Ser Leu
                       135
Ile Ser Gly Ile Tyr Ile Phe Ala Val Phe Cys Ser Ser Leu Asn Thr
                   150
                                       155
Gly Phe Met Leu Arg Thr Gln Phe Cys Asn Leu Asp Val Ile Asn His
               165
                                   170
Tyr Phe Cys Asp Leu Leu Pro Leu Leu Asn Leu Ala Ser Ser Asn Thr
           180
                               185
Phe Ile Ile Glu Ile Leu Ile Leu Val Ile Ala Thr Leu Asn Val Phe
                           200
                                               205
Ile Pro Val Leu Thr Ile Ile Thr Ser Tyr Ile Phe Ile Ile Ala Thr
                       215
                                            220
Ile Leu Cys Ile His Ser Arg Glu Gly Lys Phe Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Ile Ser Ala Val Ala Ile Phe Tyr Gly Ser Gly Ala
                                    250
               245
Phe Thr Tyr Leu Gln Pro Ser Ser Leu Asn Ser Met Gly Gln Ala Lys
                               265
Val Ser Ser Val Phe Tyr Thr Thr Val Val Pro Met Leu Asn Pro Leu
                           280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Gly Cys Gln Tyr Phe Ile Glu Glu Asn
Thr
305
<210> 1603
<211> 310
<212> PRT
<213> Mus musculus
<400> 1603
Met Arg Asn Cys Thr Leu Val Thr Glu Phe Ile Leu Val Gly Ile Pro
                                    10
Tyr Thr Ala Gly Leu Glu Arg Met Leu Phe Val Leu Phe Leu Ser Phe
            20
```

<211> 305 <212> PRT

```
Tyr Leu Leu Thr Leu Pro Gly Asn Leu Leu Ile Leu Met Ala Ile Leu
                            40
Thr Ser Ala Ser Leu His Thr Pro Met Tyr Phe Phe Leu Gly Asn Leu
                        55
Ser Val Leu Asp Ile Phe Phe Pro Ser Val Ser Ser Pro Lys Met Met
Leu Ser Leu Thr Gly His Ser His Thr Ile Ser Tyr Gln Gly Cys Ala
                                   90
               8.5
Ser Gln Leu Phe Phe Tyr His Phe Leu Gly Cys Ala Glu Cys Phe Leu
                               105
Tyr Thr Val Met Ala Tyr Asp Arg Phe Ala Ala Ile Cys His Pro Leu
        115
                           120
Arg Tyr Thr Val Ile Met Ser Ser Trp Val Cys Gly Ser Met Ala Val
   130
                       135
                                           140
Ala Thr Trp Met Gly Ser Cys Leu His Ala Ser Val Leu Thr Phe Leu
                   150
                                       155
Ile Phe Lys Leu Pro Tyr Cys Gly Pro Asn Glu Val Asp Asn Phe Phe
                165
                                    170
Cys Asp Ile Pro Val Val Leu Pro Leu Ala Cys Ala Asp Thr Ser Leu
                                185
Ala Gln Ala Val Ser Phe Ile Asn Val Gly Leu Val Ala Leu Val Cys
                            200
Phe Leu Leu Ile Leu Ile Ser Tyr Ser Arg Ile Val Ile Ser Ile Leu
                       215
Lys Ile Arg Ser Ser Glu Gly Arg Arg Arg Ala Phe Ser Thr Cys Ser
                   230
                                       235
Ala His Leu Thr Ser Ile Leu Leu Phe Tyr Gly Pro Val Val Leu Ile
                                250
               245
Tyr Leu Arg Pro Ala Ser Ser Pro Trp Leu Asp Ser Val Val Gln Val
           260
                               265
Leu Asn Asn Ile Val Thr Pro Ser Leu Asn Pro Leu Ile Tyr Ser Leu
                           280
Arg Asn Lys Glu Val Lys Val Ala Leu Arg Lys Ala Leu Thr Gln Gly
                       295
Met Arg Val Pro Gly Glu
```

<211> 315

<212> PRT

<213> Mus musculus

<400> 1604

 Met
 Thr
 Pro
 Gly
 Met
 Val
 Ser
 Glu
 Asn
 Ser
 Ser
 Val
 Lys
 Glu
 Phe

 1
 <t

```
100
                               105
Asp Glu Cys Cys Ile Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala
                           120
Ile Cys Lys Pro Leu Leu Tyr Lys Val Ile Met Ser His Gln Val Cys
                        135
Phe Val Leu Met Val Gly Gly Tyr Thr Val Gly Phe Val Gly Ala Thr
                   150
                                        155
Ala His Thr Val Cys Met Leu Arg Leu Thr Phe Cys Asp Gly Asn Ile
                                   170
               165
Ile Asn His Tyr Met Cys Asp Ile Pro Pro Leu Leu Lys Leu Ser Cys
           180
                               185
Thr Ser Thr Ser Ile Asn Glu Leu Val Val Phe Ile Val Val Gly Val
       195
                            200
                                                205
Ser Ile Ile Val Pro Ser Leu Thr Val Phe Ile Ser Tyr Thr Leu Ile
                                            220
                        215
Leu Ser Asn Ile Leu Arg Ile His Ser Ala Lys Gly Arg Ser Lys Ala
                    230
                                        235
Leu Ser Thr Cys Ser Ser His Met Ile Ala Val Ser Leu Phe Phe Gly
                245
                                    250
Ser Ser Ser Phe Ile Tyr Phe Lys Ser Ser Pro Val Gly Ser Val Asp
                                265
            260
Lys Asp Lys Ile Ser Thr Val Phe Tyr Thr Val Val Val Pro Met Met
                           280
                                                285
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Val Gln Ile Ala Leu
                        295
Arg Lys Thr Leu Lys Lys Asn Cys Ser Leu Lys
                    310
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1605

Met Leu Lys Gly Asn Leu Ser Glu Val Thr Glu Phe Ile Leu Ala Gly 5 10 Leu Thr Asn Lys Pro Glu Leu Gln Leu Pro Leu Phe Phe Leu Phe Leu 25 Ala Ile Tyr Val Val Thr Val Val Gly Asn Leu Gly Met Ile Thr Leu 40 Ile Leu Phe Ser Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 Ser Leu Ser Phe Ile Asp Leu Cys Gln Ser Thr Val Ile Ile Pro Lys 70 7.5 Met Leu Val Asn Phe Val Thr Val Lys Asn Ile Ile Ser Tyr Pro Glu 85 Cys Met Thr Gln Leu Tyr Phe Phe Val Thr Phe Ala Ile Ala Glu Cys His Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Gly Asn 115 120 Pro Leu Leu Tyr Asn Ile Met Met Ser Tyr Arg Val Cys Ser Trp Met 135 140 Ile Phe Gly Val Tyr Ile Met Ala Phe Ile Gly Ala Thr Ser His Thr 150 155 Val Cys Met Leu Arg Val His Phe Cys Lys Thr Asp Val Ile Asn His 165 170

```
Tyr Phe Cys Asp Ile Tyr Pro Leu Leu Glu Leu Ser Cys Ser Asp Thr
           180
                              185
Phe Ile Asn Glu Val Val Leu Leu Cys Phe Ser Val Phe Asn Phe Leu
                           200
                                              205
Ile Pro Thr Leu Thr Ile Leu Ser Ser Tyr Ile Phe Ile Ile Ala Ser
                       215
Ile Leu Arg Ile Lys Ser Thr Glu Gly Arg Tyr Lys Ala Phe Ser Thr
                   230
                                      235
Cys Ser Ser His Ile Ser Ala Val Ala Ile Phe Phe Gly Ser Thr Ala
               245
                                   250
Phe Met Tyr Leu Gln Pro Ser Ser Val Asn Ser Met Asp Gln Gly Lys
               265
         260
Val Ser Ser Val Phe Tyr Ser Ile Val Val Pro Met Leu Asn Pro Leu
                                             285
                          280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Asn Lys Phe
                      295
Phe Glu Arg Lys Phe Phe Leu
                   310
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1606

Met Gly Lys Glu Asn His Thr Glu Leu Ser Gln Phe Leu Leu Gly 10 Leu Ser Asp Asp Pro Lys Leu Gln Pro Ile Leu Phe Gly Ile Phe Leu 20 25 Phe Met Tyr Leu Val Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ala 40 Val Ser Ser Asp Ser His Leu His Asn Pro Met Tyr Phe Phe Leu Ser 55 Asn Leu Ser Phe Val Asp Met Cys Phe Thr Ser Thr Thr Val Pro Lys 75 70 Met Leu Val Asn Ile Gln Thr Lys Asn Lys Asn Ile Ser Tyr Met Gln 90 Cys Leu Thr Gln Val Tyr Phe Phe Met Val Phe Ala Gly Met Asp Asn 105 Phe Leu Leu Thr Val Met Ala Phe Asp Arg Phe Val Ala Ile Cys His 120 Pro Leu Asn Tyr Thr Val Ile Met Asn Pro His Phe Cys Cys Phe Leu 135 140 Val Leu Met Cys Trp Ile Ile Ile Leu Ser Val Ser Leu Phe His Ser 150 155 Leu Leu Met Lys Gln Leu Thr Phe Ser Met Gly Thr Glu Ile Pro His 165 170 Phe Phe Cys Glu Leu Ala Gln Ile Leu Arq Val Ala Ser Ser Asp Ile 180 185 Leu Ile Asn Asn Ile Ala Leu Tyr Val Ala Thr Ala Leu Leu Cys Val 200 Phe Pro Val Thr Gly Ile Leu Phe Ser Tyr Ser Gln Ile Val Ser Ser 215 220 Leu Leu Asn Met Ser Ser Val Val Ser Lys Tyr Arg Ala Phe Ser Thr 230 235 Cys Gly Ser His Leu Cys Val Val Cys Leu Phe Tyr Gly Thr Ala Leu

```
245
                                    250
Gly Val Tyr Leu Ser Ser Ala Gly Thr Asp Val Ser Gln Gly Ser Thr
            260
                               265
Ile Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Val Arg Ile
                       295
Leu Lys Val Tyr Ser Cys Pro
<210> 1607
<211> 317
<212> PRT
<213> Mus musculus
<400> 1607
Met Asp Lys Asn Asn Gln Thr Phe Val Ser Glu Phe Leu Leu Gly
Leu Ala Gly Tyr Pro Lys Thr Glu Ile Ile Tyr Phe Val Ile Val Leu
                                25
Val Met Tyr Leu Val Ile Leu Thr Gly Asn Gly Val Leu Ile Ile Ala
                           40
Ser Ile Phe Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Gly
                       55
Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Thr Ser Ser Val Pro Ser
                    70
                                        75
Thr Leu Val Ser Leu Ile Ser Lys Lys Arg Asn Ile Ser Phe Ser Gly
               85
                                    90
Cys Ala Val Gln Met Phe Phe Gly Phe Ala Met Gly Ser Thr Glu Cys
                                105
Leu Leu Gly Met Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Arg Tyr Ser Ile Ile Met Ser Lys Glu Val Tyr Val Phe Met
                        135
                                            140
Ala Ser Ala Ser Trp Phe Ser Gly Ser Ile Asn Ser Val Val Gln Thr
                   150
                                       155
Ser Leu Ala Met Arg Leu Pro Phe Cys Gly Asn Asn Val Ile Asn His
               165
                                   170
Phe Thr Cys Glu Val Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Ile
                                185
Ser Leu Asn Ile Ile Thr Met Val Ile Ser Asn Met Ala Phe Leu Val
                           200
                                                205
Leu Pro Leu Leu Val Ile Phe Phe Ser Tyr Leu Phe Ile Leu His Thr
                        215
Ile Leu Arg Met Asn Ser Ala Thr Gly Arg Arg Lys Ala Phe Ser Thr.
                    230
                                        235
Cys Ser Ala His Leu Thr Val Val Ile Ile Phe Tyr Gly Thr Ile Phe
                                    250
                245
Ser Met Tyr Ala Lys Pro Lys Ser Gln Asp Leu Thr Gly Gln Asp Lys
                               265
Phe Gln Thr Ser Asp Lys Ile Ile Ser Leu Phe Tyr Gly Val Val Thr
                           280
                                                285
Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys
                       295
Ala Ala Val Lys Tyr Ile Leu Lys Gln Lys Tyr Val Pro
```

305

```
<211> 311
<212> PRT
<213> Mus musculus
<400> 1608
Met Glu Cys Lys Arg Asn Ile Ser Glu Phe Leu Leu Met Gly Leu Ser
                                   10
Ser Lys Arg Asn Ile Glu Val Phe Cys Phe Leu Phe Phe Ser Phe Cys
                                25
Tyr Leu Ala Ile Leu Cys Gly Asn Leu Leu Ile Leu Ile Ser Ile Arg
                            40
                                                4.5
Cys Ser Ser Leu Phe Asn Gln Pro Met Tyr Tyr Phe Leu Ser His Leu
                        55
Ser Ser Met Asp Ile Phe Tyr Thr Ser Cys Val Thr Pro Lys Leu Ile
                                        75
                    70
Gly Asp Leu Leu Val Arg Arg Lys Thr Ile Ser Tyr Thr Asn Cys Met
                                    90
Leu Gln Val Phe Ala Met His Phe Phe Gly Met Ile Glu Ile Leu Ile
                                105
Leu Thr Ala Met Ala Phe Asp Arg Cys Val Ala Ile Cys Lys Pro Leu
                           120
His Tyr Met Val Ile Met Ser Arg Ser Arg Cys His Ile Leu Ile Trp
                       135
                                            140
Ala Ser Trp Val Gly Gly Ala Ala His Ser Leu Ser Gln Phe Cys Leu
                   150
                                        155
Leu Ile Cys Leu Pro Phe Cys Gly Pro Asn Glu Ile Asp His Tyr Tyr
               165
                                    170
                                                       175
Cys Asp Ile Phe Pro Leu Leu Lys Val Ala Cys Thr Asp Thr Thr Ile
                                185
Thr Gly Val Leu Val Val Ala Asn Ser Gly Leu Ile Ala Leu Val Thr
                            200
Phe Val Val Leu Phe Gly Ser Tyr Val Val Ile Leu Phe Thr Leu Arg
                        215
                                            220
Asn Tyr Ser Ala Glu Gly Arg His Lys Ala Leu Ser Thr Cys Ala Ser
                    230
                                       235
His Ile Thr Val Val Ile Leu Phe Phe Gly Pro Ser Ile Phe Ala Tyr
                                    250
                245
Leu Arg Pro Pro Thr Thr Phe Pro Glu Asp Lys Ile Phe Ala Leu Phe
                                265
Tyr Thr Ile Ile Ala Pro Met Phe Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
                                                285
Asn Thr Glu Met Lys Lys Ala Met Lys Lys Val Trp Cys Gln Asn Met
                       295
Phe Ser Glu Glu Lys His Ser
305
                    310
<210> 1609
<211> 314
<212> PRT
<213> Mus musculus
```

Met Leu Gly Leu Asn Gly Thr Pro Phe Gln Pro Ala Thr Leu Gln Leu

<210> 1608

<400> 1609

```
10
Thr Gly Ile Pro Gly Met Asn Ile Gly Gln Ala Trp Ile Ala Leu Ile
                                25
Phe Cys Phe Leu Tyr Phe Ile Ser Ile Ala Gly Asn Leu Ser Ile Leu
Ala Leu Val Ile Arg Glu Pro Pro Leu His Gln Pro Met Tyr Tyr Phe
                        55
Leu Ser Met Leu Ser Leu Asn Asp Leu Gly Val Ser Leu Ser Thr Leu
                   70
                                        75
Pro Thr Val Leu Ala Thr Phe Cys Phe Asn Tyr Arg His Val Asp Phe
                                   90
               85
Asp Ala Cys Leu Val Gln Met Phe Phe Ile His Thr Phe Ser Phe Met
           100
                                105
Glu Ser Gly Ile Leu Leu Ala Met Ser Phe Asp Arg Phe Val Ala Ile
                           120
                                               125
Cys Asp Pro Leu Arg Tyr Ser Thr Val Leu Thr Asn Ser Arg Ile Leu
                       135
                                           140
Ala Met Gly Leu Gly Ile Leu Ala Lys Ser Phe Thr Thr Leu Phe Pro
                    150
Phe Pro Phe Leu Val Lys Arg Leu Pro Phe Cys Lys Gly Asn Val Leu
                                    170
                165
His His Ser Tyr Cys Leu His Pro Asp Leu Met Lys Val Ala Cys Gly
                               185
Asp Ile His Val Asn Asn Ile Tyr Gly Leu Phe Val Val Ile Phe Thr
                           200
                                                205
Tyr Gly Val Asp Ser Val Phe Ile Leu Leu Ser Tyr Ala Leu Ile Leu
                        215
                                            220
Arg Ala Val Leu Val Ile Ala Ser His Glu Gln Arg Leu Lys Ala Leu
                                        235
                   230
Asn Thr Cys Ile Ser His Ile Cys Ala Val Leu Ala Phe Tyr Val Pro
                                   250
Ile Ile Ala Val Ser Met Ile His Arg Phe Trp Lys Ser Ala Pro Ala
            260
                                265
Val Val His Val Met Met Ser Asn Val Tyr Leu Phe Val Pro Pro Met
                            280
Leu Asn Pro Ile Ile Tyr Ser Val Lys Thr Lys Glu Ile Arg Lys Gly
                       295
Met Leu Lys Val Phe His Lys Ser Gln Thr
                    310
```

<210> 1610 <211> 314

<212> PRT

<213> Mus musculus

<400> 1610

 Met
 Ala
 Gly
 Asn
 Ala
 Thr
 His
 His
 Ile
 Ala
 Ser
 Phe
 Phe
 Leu
 Val
 Gly

 Ile
 Pro
 Gly
 Leu
 Glu
 Asn
 Phe
 His
 Cys
 Trp
 Ile
 Gly
 Ile
 Pro
 Val
 Cys

 Leu
 Phe
 Ala
 Leu
 Thr
 Leu
 Leu
 Gly
 Asn
 Ser
 Ile
 Ile
 Leu
 Thr
 Thr

 Val
 Lys
 Leu
 Glu
 Pro
 Ser
 Leu
 His
 Gln
 Pro
 Met
 Tyr
 Phe
 Phe
 Leu
 Cys

 50
 55
 55
 55
 60
 56
 60
 50

 Met
 Leu
 Ala
 Met
 Cys
 Leu
 Thr
 Cys
 Ser
 Thr
 Ala
 Leu
 Lys

 65
 70
 Tys
 Thr
 Tys
 Tys
 Thr
 Ala
 Leu
 Lys

```
Met Leu Gly Ile Phe Trp Phe Asp Glu His Trp Ile Asn Phe Asp Ala
                                    90
Cys Leu Thr Gln Met Phe Phe Ile His Thr Leu Cys Ile Met Glu Ser
            100
                                105
Ala Ile Leu Val Ala Met Ala Phe Asp Arg Phe Val Ala Ile Cys Ile
                            120
Pro Leu His Tyr Thr Ser Ile Leu Thr Met Pro Met Val Ile Lys Ile
                       135
Gly Leu Val Gly Leu Gly Arg Ala Ile Leu Met Ile Met Pro Cys Pro
                    150
                                        155
Leu Leu Ile Lys Arg Leu Leu Tyr Tyr Thr Lys Tyr Val Ile His His
                165
                                    170
Ala Tyr Cys Glu His Met Ala Val Val Lys Met Ala Ser Gly Asn Thr
            180
                                185
Gln Val Asn Arg Ile Tyr Gly Ile Leu Val Ala Leu Ser Val Thr Ile
                            200
Phe Asp Leu Gly Leu Ile Val Thr Ser Tyr Ile Lys Ile Leu Gln Ala
                        215
Val Phe Arg Leu Ser Ser Gln Asn Ala Arg Ser Lys Ala Leu Gly Thr
                    230
                                        235
Cys Val Ala His Val Cys Thr Ile Leu Ala Phe Tyr Thr Pro Ala Leu
                245
                                    250
Phe Ser Phe Leu Thr His Arg Phe Gly Lys Asn Val Pro Ala Ser Ile
                                265
His Ile Ile Phe Ala Ile Leu Tyr Leu Leu Val Ser Pro Thr Val Asn
                            280
                                                285
Pro Leu Val Tyr Gly Ala Lys Thr Lys Gln Ile Arg Asp Arg Val Val
                        295
                                            300
Ser Leu Leu Phe Ser Gln Lys Gln Lys Phe
```

<210> 1611 <211> 308

<212> PRT

<213> Mus musculus

<400> 1611

Met Leu Ile Phe Asn His Ser Ser Phe Met Thr Phe Thr Leu Leu Gly 10 Val Pro Gly Leu Glu Ser Gln His Leu Trp Leu Ser Val Pro Phe Thr 25 Ser Met Leu Leu Ala Ile Leu Ile Gly Asn Gly Ala Ile Leu Phe Leu 40 45 Val Ile Thr Glu Pro Thr Leu His Thr Pro Met Tyr Leu Leu Leu Ala 55 60 Leu Leu Met Val Ala Asp Leu Ile Ser Thr Leu Ala Leu Val Pro Lys 75 Val Leu Cys Leu Phe Trp Phe Asp Asp Arg Val Ile Ala Ile Tyr Ala 8.5 90 Cys Phe Thr Gln Met Phe Phe Ile His Gly Ala Ser Val Val Arg Ser 105 Ala Leu Leu Val Ala Met Ala Phe Asp Arg Phe Val Ala Val Cys Glu 120 Pro Leu Arg Tyr Asn Thr Ile Leu Ser His Ser Leu Val Gly Arg Leu 135 140 Gly Leu Val Ala Leu Ala Lys Gly Val Ile Leu Ile Leu Pro Met Pro

```
145
                 150
                                   155
Leu Leu Gln Arg Leu Thr Phe Cys His Arg Val Ile Pro His Thr
              165
                                170
Tyr Cys Asp His Met Ala Val Val Lys Met Ala Cys Ser Asn Thr Arg
          180
                             185
Pro Asn Arg Ile Tyr Gly Leu Phe Val Ile Leu Leu Val Val Gly Leu
                        200
Asn Leu Leu Ile Gly Phe Ser Tyr Val Phe Ile Leu Gln Ser Val
                    215
Val Arg Leu Asn Ser Arg Asp Ala Thr Phe Lys Ala Leu Asn Thr Cys
225 230 235
Ser Ala His Leu Phe Val Ile Leu Ile Thr Tyr Val Pro Ala Leu Phe
                     250
             245
Ser Ser Ile Thr His Arg Ile Gly His His Ile Pro Pro His Ala His
          260
                            265
Ile Ile Leu Ala Asn Leu Tyr Leu Leu Ile Pro Ser Val Phe Asn Pro
                         280
Ile Ile Tyr Gly Ile Lys Met Lys Glu Ile Arg Asp Arg Val Ala Lys
                     295
Cys Leu Cys Arg
305
<210> 1612
<211> 308
<212> PRT
<213> Mus musculus
```

<400> 1612															
Met 1	Thr	Asn	Phe	Thr 5	His	Val	Ser	Glu	Phe 10	Ile	Leu	Leu	Gly	Phe 15	Lys
Gly	Gly	Pro	Gly 20	Ile	Gln	Met	Leu	Leu 25	Phe	Leu	Ile	Phe	Leu 30	Phe	Leu
Tyr	Val	Ile 35	Ala	Val	Val	Gly	Asn 40	Phe	Gly	Met	Ile	Ile 45	Ile	Ile	Arg
Met	Asp 50	Ala	His	Leu	His	Thr 55	Pro	Met	Tyr	Ala	Phe 60	Leu	Gln	Ser	Leu
Ser 65	Phe	Leu	Asp	Ile	Cys 70	Tyr	Ser	Ser	Thr	Ile 75	Ala	Pro	Arg	Ala	Leu 80
Ile	Asn	Cys	Met	Lys 85	Gln	Asp	His	Thr	Ile 90	Ser	Phe	Ser	Gly	Cys 95	Ala
Thr	Gln	Phe	Phe 100	Phe	Leu	Ser	Leu	Phe 105	Gly	Thr	Thr	Glu	Ala 110	Phe	Leu
Leu	Ala	Ala 115	Met	Ala	Tyr	Asp	Arg 120	Phe	Ile	Ala	Ile	Cys 125	Asn	Pro	Leu
Leu	Tyr 130	Ser	Val	Ser	Met	Ser 135	His	Trp	Val	Cys	Gly 140	Leu	Leu	Val	Ser
Gly 145	Ser	Tyr	Ser	Trp	Gly 150	Ala	Val	Asn	Ala	Val 155	Thr	Gln	Thr	Thr	Met 160
Thr	Phe	Thr	Leu	Thr 165	Phe	Cys	Gly	Ser	Asn 170	Glu	Ile	Asn	Asp	Phe 175	Phe
Cys	Asp	Val	Pro 180	Pro	Leu	Leu	Ser	Leu 185	Ser	Cys	Ser	Asp	Thr 190	Phe	Ile
Asn	Gln	Leu 195	Val	Leu	Leu	Ala	Leu 200	Cys	Gly	Ser	Ile	Ile 205	Val	Ser	Thr
Phe	Leu 210	Thr	Val	Phe	Val	Ser 215	Tyr	Ile	Tyr	Ile	Ile 220	Ser	Thr	Ile	Leu

<210> 1613 <211> 311 <212> PRT <213> Mus musculus

<400> 1613

Met Gln Asn Gln Ser Phe Val Thr Glu Phe Ile Ile Leu Gly Leu Ser 10 Gln Asn Pro Ile Val Glu Lys Ile Leu Phe Phe Val Leu Leu Val 25 Tyr Leu Ala Thr Ile Gly Gly Asn Ile Ile Ile Val Val Thr Ile Met 40 Tyr Ser Pro Ala Leu Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Phe 55 Leu Ser Phe Leu Asp Leu Cys Val Ser Ser Thr Val Thr Pro Lys Met 70 75 Ile Val Asp Phe Phe Tyr Glu Lys Lys Thr Ile Ser Phe Gly Cys Cys 90 Met Met Gln Leu Phe Ser Val His Phe Phe Ser Gly Thr Glu Met Ile Val Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro 120 125 Leu His Tyr Phe Ser Ile Leu Thr Arg Arg Leu Cys Ser Ile Leu Val 135 140 Ala Ile Ser Trp Ala Gly Gly Phe Leu His Ser Ile Ile Gln Val Ile 150 155 Phe Thr Leu Gln Leu Pro Leu Cys Gly Pro Asn Val Ile Asp His Tyr 165 170 175 Thr Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr His 180 185 Ile Phe Val Leu Leu Val Phe Ala Asn Ser Gly Ala Ile Cys Ile Ile 200 205 Ile Phe Ser Leu Leu Val Ser Tyr Gly Val Ile Leu Phe Ser Leu 215 Arg Ala His Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly 230 235 Ala His Val Thr Val Val Leu Phe Leu Val Pro Cys Ile Leu Ile 245 250 Tyr Ala Arg Asp Thr Ser Ala Phe Ser Phe Glu Lys His Thr Leu Leu 260 265 270 Phe Val Asn Val Leu Thr Pro Leu Leu Asn Pro Thr Val Tyr Thr Phe 280 Arg Asn Lys Glu Met Ile Asn Ala Ile Arg Lys Met Cys Lys Arg Leu

Lys Met Ile Phe Val Arg Phe

<210> 1614

<211> 320

<212> PRT

<213> Mus musculus

<400> 1614

Met Glu Glu Val Asn Cys Thr Phe Met Ala Glu Phe Ile Leu Leu Gly 10 Phe Ser Asp Val Pro Glu Leu Ala Ile Phe Leu Phe Leu Val Phe Leu 20 25 Val Ile Tyr Gly Val Thr Val Ile Ala Asn Leu Gly Met Thr Val Leu 40 Ile Gln Val Ser Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 His Leu Ser Phe Val Asp Phe Cys Tyr Ala Ser Ile Ile Val Pro Lys 70 75 Met Phe Thr Asp Ile Ile Asn Gln Asp Gln Val Ile Ser Tyr Leu Glu 90 Cys Met Leu Gln Phe Tyr Leu Phe Cys Thr Phe Ala Ile Thr Glu Val 105 Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Asn 120 Pro Leu Leu Tyr Thr Val Ile Met Ser Pro Lys Leu Arg Leu Val Leu 135 140 Val Ser Cys Cys Tyr Leu Tyr Ala Ser Val Cys Ser Leu Ile His Leu 150 155 Cys Leu Ala Leu Glu Ile Thr Ser Phe Lys Ser Asn Val Ile Asn His 165 170 Phe Phe Cys Asp Leu Pro Pro Leu Leu Ser Leu Ala Cys Ser Asp Val 185 Ser Thr Asn Glu Phe Phe Leu Phe Ile Ile Val Asn Phe Asn Glu Ile 200 Leu Thr Ile Val Ile Ile Phe Thr Ser Tyr Leu Phe Ile Leu Ile Thr 215 220 Ile Leu Lys Met Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr 230 235 Cys Ala Ser His Leu Thr Val Ile Met Val Phe His Gly Thr Ile Leu 245 250 Phe Ile Tyr Cys Gln Pro Asn Ser Gly Asn Ser Leu Asp Val Asp Lys 265 Val Thr Thr Val Phe Tyr Thr Val Ile Ile Pro Met Leu Asn Pro Leu 280 285 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Arg Lys Met 295

Leu Gly Ser Lys Lys Asn Ser Leu Leu Asp Phe Phe Phe Cys Phe

<210> 1615

<211> 318

<212> PRT

<213> Mus musculus

```
<400> 1615
Met Ile Leu Ser Glu Lys Asn Asn Ser Gly Ile Ile Phe Thr Leu Leu
Gly Phe Ser Asp Tyr Pro Asp Leu Lys Val Pro Leu Phe Leu Val Phe
                                25
Leu Val Ile Tyr Ser Ile Thr Val Val Gly Asn Ile Gly Met Ile Leu
                            40
Val Ile Arg Ile Asn Pro Gln Leu His Ser Pro Met Tyr Phe Phe Leu
                       55
Ser His Leu Ser Phe Val Asp Phe Cys Tyr Ser Ser Ile Ile Ala Pro
                   70
                                        75
Lys Met Leu Val Asn Leu Val Ala Lys Asp Ile Thr Ile Ser Phe Val
Glu Cys Ile Val Gln Tyr Phe Leu Phe Cys Val Phe Val Val Thr Glu
           100
                               105
Ala Phe Leu Leu Val Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
                           120
Asn Pro Leu Leu Tyr Thr Val Ala Met Ser Gln Lys Leu Cys Ile Thr
                       135
                                            140
Leu Val Val Gly Ser Tyr Ala Trp Gly Phe Thr Cys Ser Leu Thr Leu
                    150
                                        155
Thr Cys Ser Thr Val Gln Leu Ser Phe His Gly Val Asn Arg Ile Asp
               165
                                   170
His Phe Phe Cys Glu Leu Ser Ser Leu Leu Ala Leu Ser Ser Asp
                               185
Thr Leu Ile Ser Gln Leu Leu Phe Val Phe Ala Thr Phe Asn Ala
       195
                           200
                                                205
Val Ser Thr Leu Leu Leu Ile Leu Leu Ser Tyr Leu Phe Ile Val Val
                       215
                                           220
Thr Val Leu Lys Met Arg Ser Ala Ser Gly Arg Arg Lys Ala Phe Ser
                   230
                                      235
Thr Cys Ala Ser His Leu Ala Ala Ile Thr Ile Phe His Gly Thr Ile
                245
                                    250
Leu Phe Leu Phe Cys Val Pro Asn Ser Lys Asn Ser Arg Leu Thr Val
                               265
Lys Val Gly Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro
                           280
                                                285
Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Gln Asp Thr Ile Arg Lys
                      295
Ile Met Thr Leu Ile Ser Cys Val Lys Asn Asp Arg His Asn
                    310
                                        315
```

```
<210> 1616
<211> 317
<212> PRT
<213> Mus musculus
```

<400> 1616

```
50
                       55
Met Tyr Tyr Phe Leu Phe Asn Leu Ser Phe Val Asp Ile Cys Tyr Ser
                   70
                                       75
Ser Val Phe Thr Pro Lys Met Leu Ile Asn Phe Val Val Glu Lys Asn
                                   90
Thr Ile Ser Tyr Thr Gly Cys Leu Thr Gln Leu Tyr Phe Phe Cys Phe
                               105
Phe Val Ile Thr Glu Cys Tyr Leu Leu Thr Ala Met Ala Tyr Asp Arg
                           120
Tyr Val Ala Ile Cys Lys Pro Leu Leu Tyr Asn Val Ile Leu Ser Pro
                       135
Arg Ile Cys Ala Val Phe Val Phe Gly Ala Tyr Val Met Gly Cys Trp
                   150
                                       155
Gly Ser Leu Ala His Thr Leu Cys Met Ala Arq Leu Thr Phe Cys Asp
                                   170
               165
Ala Asn Leu Val Asn His Tyr Leu Cys Asp Ile Leu Pro Val Leu Gln
           180
                               185
Leu Ser Cys Thr Ser Thr Tyr Asn Asn Glu Val Val Phe Val Leu
                           200
Val Gly Met Asn Ile Val Val Ser Thr Ser Thr Thr Phe Ile Ser Tyr
                        215
Gly Phe Ile Ile Ala Asn Ile Leu Arg Ile Ser Ser Thr Gln Asp Arg
                    230
                                        235
Ala Lys Ala Phe Asn Thr Cys Ser Ser His Ile Met Thr Val Ser Leu
                245
                                   250
Phe Phe Gly Ala Ala Ala Phe Met Tyr Met Gln Pro Ser Asp Val Glu
                               265
Ser Met Asp Lys Gly Lys Val Ala Ser Val Phe Tyr Thr Asn Val Gly
                           280
Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys
                       295
Val Ala Leu Lys Lys Thr Leu Lys Arg Lys Leu Phe Ser
                   310
```

<211> 308

<212> PRT

<213> Mus musculus

<400> 1617

 Met
 Asn
 His
 Ser
 Ser
 Val
 Thr
 Asp
 Phe
 Ile
 Leu
 Glu
 Gly
 Leu
 Thr
 Lys

 Arg
 Pro
 Glu
 Leu
 Gln
 Leu
 Pro
 Leu
 Phe
 Leu
 Leu
 Phe
 Phe
 Leu
 Phe
 P

```
Tyr Asn Thr Val Met Ser His Lys Val Cys Ser Ile Met Met Ala Val
                       135
Val Tyr Ser Leu Gly Phe Phe Gly Ala Thr Val His Thr Thr Arg Met
                    150
                                        155
Thr Met Leu Ser Phe Cys Gly Ser His Ile Ile Arg His Tyr Phe Cys
                                    170
Asp Ile Leu Pro Leu Leu Thr Leu Ser Cys Ser Ser Thr His Ile Asn
                               185
Glu Val Leu Leu Phe Ile Ile Gly Gly Val Asn Thr Leu Ala Pro Thr
                           200
                                                205
Leu Ala Val Ile Ile Ser Tyr Ala Phe Ile Leu Thr Ser Ile Leu Arg
                       215
                                            220
Ile Arg Ser Asn Glu Gly Arg Ser Lys Ala Phe Gly Thr Cys Ser Ser
                    230
                                       235
His Ile Met Ala Val Gly Ile Phe Phe Gly Ser Ile Thr Phe Met Tyr
               245
                                    250
Phe Lys Pro Pro Ser Ser Asn Asn Met Glu Glu Lys Val Ser Ser
            260
                                265
Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser
                            280
Leu Arg Asn Lys Asp Val Lys Thr Ala Leu Lys Lys Met Val Gly Arg
                        295
                                            300
Arg Gln Leu Ser
305
```

<210> 1618 <211> 316 <212> PRT

<213> Mus musculus

<400> 1618

Asn Gly Ile Pro Gly Leu Glu Ala Ala His Ile Trp Ile Ser Leu Pro 25 Phe Phe Ile Met Tyr Leu Ile Ala Val Thr Gly Asn Cys Gly Leu Ile 40 Tyr Leu Ile Ser His Glu Glu Ala Leu His Arg Pro Met Tyr Tyr Phe 55 Leu Ala Met Leu Ser Ala Thr Asp Ile Ser Gly Cys Asn Thr Ile Val 70 7.5 Pro Ser Met Leu Cys Ile Phe Trp Phe Ser Val Lys Glu Ile Asp Phe 85 90 Asn Ala Cys Leu Val Gln Met Phe Phe Ile His Met Leu Thr Gly Met 105 Glu Ser Gly Val Leu Met Leu Met Ala Leu Asp Arg Tyr Val Ala Ile 115 120 Cys Tyr Pro Leu Arg Tyr Thr Thr Ile Leu Thr Asn Thr Met Ile Thr 130 135 140 Lys Ile Gly Leu Ala Ala Leu Val Arg Ser Val Leu Leu Met Val Pro 150 155 Phe Ala Phe Leu Ile Lys Arg Leu Pro Tyr Cys Arg Gly Asn Leu Ile 165 170 Gln His Thr Tyr Cys Asp His Met Ala Val Ala Lys Leu Ser Cys Gly 185 Asn Ile Lys Ile Asn Ala Ile Tyr Gly Leu Ile Ile Ala Ile Phe Ile

Met Pro Gly Val Asn Thr Ser Ser Leu Thr Pro Arg Tyr Phe Ile Leu

```
195
                           200
                                              205
Gly Gly Phe Asp Ile Phe Cys Ile Ser Met Ser Tyr Ala Met Ile Ile
                       215
                                           220
His Ala Val Val Lys Leu Ser Ser Ala Asp Ala Arg His Lys Ala Phe
                   230
                                       235
Ser Thr Cys Thr Ser His Ile Cys Ala Ile Val Ile Thr Tyr Val Pro
                                   250
               245
Ala Phe Phe Asn Phe Phe Thr His Arg Phe Gly Arg Thr Thr Ile Pro
                              265
His His Ile His Ile Ile Ala Asn Leu Tyr Leu Leu Pro Pro
                          280
                                              285
Thr Leu Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu
                       295
Gly Val Ile Lys Leu Phe Ala Arg Gln Lys Val Val
                   310
```

<210> 1619 <211> 313

<212> PRT

<213> Mus musculus

260

<400> 1619

Met Tyr Asn Leu Ser Cys Tyr Asn Pro Ala Ser Phe Thr Leu Val Gly 10 Ile Pro Gly Leu Glu Lys Phe His Ile Trp Ile Gly Ile Pro Phe Cys 25 Val Ile Tyr Val Val Ala Ile Val Gly Asn Cys Ile Leu Leu Tyr Leu 40 Ile Ala Val Glu Gln Ser Leu His Glu Pro Met Phe Ile Phe Leu Ser 55 Met Leu Ala Ser Thr Asp Leu Ile Leu Ser Thr Ala Thr Val Pro Lys 75 Leu Leu Ser Asn Leu Trp Phe Gly Ser Gln Glu Ile Thr Phe Ser Gly Cys Leu Thr Gln Met Phe Phe Leu His Phe Ser Phe Val Val Asp Ser 105 100 Ala Ile Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Leu 120 Pro Leu Arg Tyr Ser Thr Ile Leu Thr Pro Gln Val Ile Val Lys Ile 135 140 Met Val Ser Ile Ile Val Arg Ser Phe Ser Val Ile Leu Pro Asp Val 150 155 Phe Leu Leu Arg Arg Leu Pro Phe Cys Lys Thr Arg Val Ile Pro His 165 170 Thr Tyr Cys Glu His Ile Gly Val Ala Arg Leu Ser Ser Ala Asp Ile 185 Ser Ile Asn Ile Trp Tyr Gly Phe Ser Val Pro Leu Met Thr Val Ile Ser Asp Val Ile Leu Ile Ala Val Ser Tyr Ile Phe Ile Leu Arg Ala 215 220 Val Phe Leu Leu Ser Ser Gln Gly Ala Arg Gln Lys Ala Leu Ser Thr 230 235 Cys Gly Ser His Ile Cys Val Ile Leu Met Phe Tyr Thr Pro Ala Phe 245 250 Phe Ser Ile Leu Ala His Arg Phe Gly His Ser Val Pro Arg Asn Val

Leu Ile Leu Phe Ala Asn Phe Tyr Val Ala Ile Pro Pro Ala Leu Asn 275 280 285

Pro Val Val Tyr Gly Val Lys Thr Lys Gln Ile Gln Asp Lys Phe Leu 290 295 300

Leu Phe Phe Ser Leu Arg Lys Thr Gln 310

<210> 1620 <211> 313 <212> PRT <213> Mus musculus

<400> 1620

Met Thr Ala Leu Ser Val Thr Asn Tyr Thr Ser Ser Arg Phe Ala Leu Thr Gly Phe Pro Gly Leu Glu Ile Tyr Tyr Phe Trp Ile Ser Val Pro Phe Phe Ile Ile Tyr Val Thr Val Phe Leu Gly Asn Cys Met Val Leu His Val Ile Arg Thr Glu Leu Ser Leu His Gln Pro Met Phe Tyr Phe 55 Leu Ala Met Leu Ala Leu Thr Asp Leu Cys Met Gly Leu Ser Thr Val 75 His Thr Val Met Gly Ile Leu Trp Gly Phe Leu Gln Glu Ile Ser Leu 85 90 Asp Ala Cys Ile Ala Gln Ser Tyr Phe Ile His Gly Leu Ser Phe Met 105 Glu Ser Ser Val Leu Leu Thr Met Ser Phe Asp Arg Tyr Ile Ala Ile 120 125 Cys Asn Pro Leu Arg Tyr Ser Ser Ile Leu Thr Asn Asp Arg Ile Leu 135 140 Lys Ile Gly Val Ala Ile Leu Cys Arg Ser Ser Met Leu Ile Pro Pro 155 Val Ile Ile Arg Leu Lys Phe Leu Asn Tyr Cys Arg Pro His Phe Leu 170 165 Ser His Ser Phe Cys Leu His Gln Asp Leu Ile Arg Met Ala Cys Gly 185 Asp Ile Arg Phe Asn Ser Ile Tyr Gly Leu Ala Leu Val Ile Ser Asn 195 200 205 Leu Leu Val Asp Ser Val Leu Ile Leu Ile Ser Tyr Ile Met Ile Leu 215 220 Tyr Thr Val Leu Ser Ile Ala Ser Arg Glu Glu Arg Ile Lys Ser Leu 230 235 Gln Thr Cys Val Ser His Ile Ser Ala Val Leu Val Phe Tyr Ile Pro 245 250 Ile Ile Gly Leu Thr Met Val His Arg Phe Gly Lys His Leu Ser Pro 265 Leu Val His Val Leu Met Gly Asn Val Tyr Ile Leu Phe Pro Pro Leu 280 285 Met Asn Pro Ile Ile Tyr Ser Ile Lys Thr Gln Gln Ile Arg Val Arg 295 Ile Gln Arg Leu Phe Leu Lys Gly Thr 310

```
<212> PRT
<213> Mus musculus
<400> 1621
Met Val Val Thr Asn Gly Ser Leu Val Thr Glu Phe Ile Leu Leu Gly
                                    10
Leu Thr Asp Asn Pro Asp Leu Gln Ile Pro Leu Phe Leu Val Phe Leu
                               25
Val Met Tyr Met Ile Thr Ala Phe Gly Asn Leu Thr Leu Ile Leu Leu
                           40
Thr Val Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe
                       55
Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Val Thr Pro Lys
                   70
                                       75
Leu Leu Met Asn Phe Val Leu Lys Lys Asn Ile Ile Gly Phe Ala Gly
Cys Met Thr Gln Leu Tyr Phe Phe Cys Phe Phe Val Ile Ser Glu Cys
                               105
Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                           120
Pro Leu Met Tyr Asn Val Thr Met Ser Pro Lys Val Cys Ser Tyr Leu
                       135
Met Leu Gly Ser Tyr Leu Met Gly Phe Ser Asp Ala Met Ile His Thr
                   150
                                       155
Gly Cys Ile Leu Arg Leu Thr Phe Cys Asp Gly Asn Thr Ile Asn His
               165
                           170
Tyr Phe Cys Asp Leu Leu Pro Leu Met Gln Leu Ser Cys Thr Ser Thr
                               185
                                                   190
Tyr Ile Asn Glu Val Glu Ile Phe Ile Val Gly Gly Lys Asp Ile Thr
                           200
Val Pro Ser Ile Val Ile Ile Ile Ser Tyr Gly Phe Ile Leu Ser Asn
                       215
                                           220
Ile Leu Gln Ile Lys Ser Thr Gly Gly Arg Ser Lys Ala Phe Asn Thr
                   230
                                       235
Cys Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Cys Ala
               245
                                   250
Phe Met Tyr Leu Lys Pro Pro Ser Ala Gly Ser Leu Asn Glu Gly Lys
                               265
Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Arg Lys Thr
                       295
Leu Ser Arg Arg Lys Phe
305
<210> 1622
<211> 310
<212> PRT
<213> Mus musculus
<400> 1622
Met Val Leu Thr Asn His Ser Leu Val Thr Glu Phe Ile Leu Leu Gly
                                   10
Leu Thr Asp Asn Pro Asp Leu Gln Ile Pro Leu Phe Leu Val Phe Leu
           20
                               25
```

<211> 310

```
Val Met Tyr Met Ile Thr Ala Phe Gly Asn Leu Thr Leu Ile Phe Leu
Thr Val Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe
                        55
Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Val Val Thr Pro Lys
                                        75
Leu Leu Met Asn Phe Val Leu Lys Lys Asn Ile Ile Gly Phe Ala Gly
                                    90
Cys Met Thr Gln Leu Tyr Phe Phe Cys Phe Phe Val Ile Ser Glu Cys
                                105
Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                          120
Pro Leu Met Tyr Asn Val Thr Met Ser Pro Lys Val Cys Ser Tyr Leu
                       135
                                           140
Met Leu Gly Ser Tyr Leu Met Gly Phe Ser Asp Ala Met Ile His Thr
                   150
                                       155
Gly Cys Ile Leu Arg Leu Thr Phe Cys Asp Gly Asn Thr Ile Asn His
                165
                                    170
Tyr Phe Cys Asp Leu Leu Pro Leu Met Gln Leu Ser Cys Thr Ser Thr
           180
                                185
Tyr Ile Asn Glu Val Glu Ile Phe Ile Val Gly Gly Lys Asp Ile Thr
                           200
                                                205
Val Pro Ser Ile Val Val Phe Ile Ser Tyr Gly Phe Ile Leu Ser Asn
                                            220
                       215
Ile Leu Gln Ile Lys Ser Thr Gly Gly Arg Tyr Lys Ala Phe Asn Thr
                   230
                                        235
Cys Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Cys Ala
                                   250
               245
Phe Met Tyr Leu Lys Pro Ser Ser Val Gly Ser Leu Asn Glu Gly Lys
                               265
Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Met Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Leu Arg Lys Thr
                       295
Leu Ser Arg Lys Lys Phe
305
```

<210> 1623 <211> 311 <212> PRT

<213> Mus musculus

<400> 1623

 Met
 Glu
 Asn
 Tyr
 Thr
 Arg
 Val
 Lys
 Glu
 Leu
 Ile
 Phe
 Leu
 Gly
 Leu
 Thr

 Gln
 Ser
 Glu
 Val
 Ser
 Met
 Val
 Leu
 Phe
 Leu
 Phe
 Leu
 Phe
 Leu
 Leu
 Leu
 Val
 Thr
 Thr

```
100
                               105
Leu Ser Val Met Ala Leu Asp Arg Tyr Val Ala Ile Ser Lys Pro Leu
                           120
His Tyr Val Thr Ile Met Ser Arg Gly Arg Cys Ile Gly Leu Ile Val
                        135
Ala Ser Trp Val Gly Gly Phe Ala His Ser Ile Val Gln Ile Ser Leu
                   150
                                       155
Leu Leu Thr Leu Pro Phe Cys Gly Pro Asn Val Leu Asp Thr Phe Tyr
               165
                                   170
Cys Asp Val Pro Gln Val Ile Lys Leu Ala Cys Thr Asp Ile Phe Val
           180
                                185
Leu Glu Leu Leu Met Ile Ser Asn Asn Gly Leu Val Ala Thr Leu Trp
                           200
                                                205
Phe Val Leu Leu Val Val Ser Tyr Thr Val Ile Leu Met Met Leu Arg
                       215
                                            220
Ser His Ser Gly Glu Gly Arg Lys Lys Ala Ile Ser Thr Cys Thr Ser
                    230
                                        235
His Ile Thr Val Val Thr Leu His Phe Val Pro Cys Ile Tyr Val Tyr
                                    250
Ala Arg Pro Phe Thr Ala Leu Pro Thr Asp Lys Ala Ile Ser Val Thr
                                265
           260
Phe Thr Val Ile Ser Pro Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                           280
Asn Gln Glu Met Lys Ser Ala Met Arg Arg Leu Arg Lys Arg Leu Glu
                        295
                                            300
Pro Phe Asp Arg Glu Glu Gln
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1624

Met Gly Lys Ser Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr 10 Gln Asp Pro Ala Gly Arg Lys Ala Leu Phe Val Met Phe Leu Leu Ile 25 Tyr Ile Val Thr Met Val Gly Asn Leu Leu Ile Val Glu Thr Val Ile Ser Ser Pro Ser Leu Asp Ser Pro Met Tyr Phe Phe Leu Ala Ser Leu 55 Ser Leu Met Asp Ala Val Tyr Ser Thr Ala Phe Ser Pro Lys Leu Ile 75 Met Asp Leu Leu Cys Asn Arg Arg Thr Ile Ser Val Ser Ala Cys Ile 85 90 Gly Gln Leu Phe Val Glu His Leu Phe Gly Gly Ala Glu Val Phe Leu 100 105 Leu Val Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 His Tyr Met Thr Ile Met Asn Arg Gln Val Cys Ile Leu Leu Val 135 140 Ala Ala Cys Ala Gly Gly Phe Gly His Ser Leu Val Gln Val Ile Val 150 155 Val Cys Tyr Leu Pro Phe Cys Gly Pro Asn Thr Ile Asp His Phe Ile 165 170 175

```
Cys Asp Met Tyr Pro Leu Leu Gly Leu Ala Cys Thr Asp Thr Tyr Leu
           180
                                185
Ile Gly Leu Thr Val Val Ala Asn Gly Gly Ala Ile Cys Met Thr Val
                                                205
        195
                            200
Phe Ile Leu Leu Val Ser Tyr Gly Ile Ile Leu Asn Ser Leu Lys
                        215
                                            220
Ser His Ser Glu Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                    230
                                        235
His Ile Ile Val Val Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
                                    250
                245
Val Arg Pro Val Ser Asn Phe Pro Ile Asp Lys Ser Leu Thr Val Val
                                265
Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
        275
                            280
                                               285
Asn Ala Glu Met Lys Asn Ser Met Lys Lys Leu Trp Cys Glu Arg Leu
                        295
Thr Met Glu Arg Leu Arg Met Phe Pro His
                    310
```

<210> 1625 <211> 312 <212> PRT

<213> Mus musculus

<400> 1625

Met Ala Val Thr Asn Glu Ser His Pro Lys Glu Phe Ile Leu Leu Gly 1.0 Phe Ala Asn His Pro Trp Leu Glu Leu Pro Leu Phe Val Thr Leu Leu 25 Ile Thr Tyr Pro Met Ala Leu Met Gly Asn Ile Ala Ile Ile Leu Val 45 Ser Thr Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu Thr 55 Asn Leu Ser Phe Leu Asp Met Cys Tyr Thr Thr Ser Ile Val Pro Gln 70 7.5 Met Leu Phe Asn Leu Gly Ser Ser Arg Lys Thr Ile Thr Tyr Ile Gly 90 Cys Val Val Gln Leu Tyr Val Phe His Ile Met Gly Gly Thr Glu Cys 100 105 Leu Leu Leu Ala Ile Met Ser Phe Asp Arg Tyr Val Ala Ile Cys Lys 120 125 Pro Leu His Tyr Thr Leu Ile Met Asn Gln Arg Val Cys Ile Leu Leu 135 140 Val Ser Ile Met Trp Leu Thr Gly Val Ile Phe Ala Phe Ser Glu Ala 150 155 Thr Leu Thr Leu Gln Leu Pro Leu Cys Gly Ile His Lys Leu Asp His 165 170 Leu Leu Cys Glu Ile Pro Val Leu Ile Lys Thr Ala Cys Gly Glu Lys 180 185 190 Glu Ser Asn Glu Leu Ala Leu Ser Val Val Cys Ile Phe Ile Leu Ala 200 Val Pro Leu Cys Leu Ile Leu Ala Ser Tyr Val Asn Ile Gly Cys Ala 215 220 Val Leu Arg Ile Lys Ser Ser Glu Gly Arg Lys Lys Ala Phe Gly Thr 230 235 Cys Ser Ser His Leu Val Val Val Ser Leu Phe Tyr Gly Pro Ala Ile

```
245
                                   250
Ser Met Tyr Leu Gln Pro Ser Ser Ser Ile Thr Arg Asp Gln Pro Lys
           260
                               265
Phe Met Ala Leu Phe Tyr Ala Val Ile Thr Pro Thr Leu Asn Pro Phe
                           280
Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Lys Lys Leu
            295
Leu Arg Ser Ile Phe Ser Ser Lys
<210> 1626
<211> 313
<212> PRT
<213> Mus musculus
<400> 1626
Met Met Gln Ile Thr Met Glu Asn Lys Ser Ser Val Ser Glu Phe Ile
Leu Met Gly Leu Thr Asp Gln Pro Glu Leu Gln Leu Pro Leu Phe Val
                               2.5
Leu Phe Leu Met Asn Tyr Thr Ala Thr Val Met Gly Asn Leu Thr Leu
Met Asn Leu Ile Cys Leu Asn Ser Asn Leu His Thr Pro Met Tyr Phe
                       55
Phe Leu Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Met Val Phe
                   70
                                       75
Thr Pro Lys Met Leu Met Ser Phe Ile Leu Glu Lys Asn Thr Ile Ser
               85
                                   90
Phe Gly Gly Cys Met Ala Gln Leu Phe Phe Leu Phe Phe Val Asn
                               105
Ser Glu Ser Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala
                           120
Ile Cys Lys Pro Leu Thr Tyr Lys Val Ile Met Ser Pro Lys Ile Cys
                       135
                                           140
Cys Leu Leu Ile Phe Ser Ser Tyr Leu Met Gly Phe Ala Ser Ala Met
                  150
                                      155
Ala His Thr Gly Cys Met Ile Arg Leu Ser Phe Cys Asp Ser Asn Ile
               165
                                  170
Ile Asn His Tyr Met Cys Asp Ile Phe Pro Leu Leu Pro Leu Ser Cys
                              185
Ser Ser Thr Tyr Val Asn Glu Leu Met Ser Ser Val Val Val Gly Ser
                           200
                                              205
Ala Ile Ile Leu Cys Cys Leu Ile Ile Leu Ile Ser Tyr Ala Met Ile
                       215
Leu Phe Asn Ile Ile His Met Ser Ser Gly Lys Gly Trp Ser Lys Ala
                   230
                                       235
Leu Gly Thr Cys Gly Ser His Ile Ile Thr Val Ser Leu Phe Tyr Gly
               245
                                   250
Ser Gly Leu Leu Ala Tyr Val Lys Pro Ser Ser Ala Lys Thr Val Gly
                               265
Gln Gly Lys Phe Phe Ser Val Phe Tyr Thr Leu Leu Val Pro Met Leu
                          280
                                              285
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala Val
                       295
Lys Lys Thr Trp Lys Arg Ile Thr Ser
                   310
```

```
<211> 310
<212> PRT
<213> Mus musculus
<400> 1627
Met Ala Leu Glu Asn Ala Ser Leu Val Thr Glu Phe Ile Leu Met Gly
                                    10
Leu Thr Asn Arg Pro Asp Leu Gln Ile Pro Leu Phe Leu Leu Phe Leu
                                25
Val Met Tyr Val Ile Ala Thr Leu Gly Asn Leu Ala Leu Ile Met Leu
        35
                            40
Ile Ile Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Leu
                        55
Asn Leu Ser Cys Ile Asp Leu Phe Tyr Cys Ser Val Ile Thr Pro Lys
                                        75
                    70
Met Leu Met Asn Phe Val Leu Lys Lys Asn Val Ile Ser Tyr Glu Gly
                85
                                    90
Cys Met Ala Gln Phe Tyr Phe Phe Ala Phe Phe Ala Ile Ser Glu Cys
           100
                               105
Tyr Val Leu Thr Thr Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
                                                125
Pro Leu Leu Tyr Asn Ile Val Met Ser Pro Lys Leu Cys Ser Tyr Leu
                    135
                                           140
Met Met Gly Thr Tyr Leu Met Gly Phe Ser Gly Ala Met Ile His Thr
                   150
                                        155
Gly Cys Ile Leu Arg Leu Thr Phe Cys Asp Lys Asn Thr Ile Asn His
                165
                                   170
Tyr Phe Cys Asp Ile Leu Pro Leu Leu Gln Ile Ser Cys Thr Ser Thr
            180
                                185
Tyr Val Asn Glu Ile Glu Leu Phe Ile Val Ala Gly Lys Asp Ile Ile
                            200
Val Pro Thr Val Ile Ile Phe Thr Ser Tyr Gly Phe Ile Leu Ser Ser
                        215
                                            220
Ile Leu Lys Ile Ser Ser Thr Ala Gly Met Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Ile Ile Ala Leu Cys Leu Phe Phe Gly Ser Cys Thr
                245
                                    250
Phe Met Tyr Leu Lys Pro Ser Ser Val Glu Ser Met Asp Gln Gly Lys
                                265
Ile Ser Ser Val Phe Tyr Asn Ile Val Val Pro Leu Met Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ile Ala Ile Lys Lys Thr
                        295
Ile Thr Ile Gly Lys Phe
305
                    310
<210> 1628
<211> 310
<212> PRT
<213> Mus musculus
```

Met Gly Phe Glu Asn Gly Ser Ser Val Thr Glu Phe Ile Leu Val Gly

<210> 1627

<400> 1628

```
Leu Thr Lys Glu Ser Asp Leu Gln Cys Pro Leu Phe Ile Leu Phe Leu
                               25
Met Met Tyr Val Val Thr Val Leu Gly Asn Gln Gly Leu Ile Ser Leu
Ile Gly Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe
                       55
Asn Leu Ser Phe Val Asp Leu Trp Tyr Ser Ser Val Phe Thr Pro Lys
                   70
                                       75
Met Leu Glu Ser Phe Ile Ser Glu Lys Asn Thr Ile Ser Tyr Arg Gly
                                   90
               85
Cys Met Ala Gln Leu Phe Phe Cys Phe Phe Ser Ile Ser Glu Cys
                              105
Tyr Ile Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                          120
                                              125
Pro Leu Leu Tyr Asn Ile Val Met Ser Pro Lys Leu Cys Leu Ile Leu
                       135
Met Phe Ser Ser Tyr Met Met Ala Phe Ser Gly Ala Met Ala His Thr
                   150
                                       155
Gly Cys Met Leu Arg Leu Thr Phe Cys Asp Ala Asn Thr Ile Asn His
               165
                                   170
Tyr Phe Cys Asp Ile Leu Pro Val Met Gln Leu Ser Cys Thr Ser Thr
           180
                               185
Tyr Val Asn Glu Leu Glu Val Phe Val Val Val Gly Ile Asn Ile Ile
                           200
Val Pro Thr Ile Thr Ile Phe Ile Ser Tyr Gly Phe Ile Ile Ser Ser
                       215
                                           220
Ile Phe Arg Ile Ser Ser Lys Glu Gly Arg Ser Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Gly Ala
               245
                                  250
Phe Met Tyr Leu Lys Pro Ser Ser Ala Glu Ser Met Asn Glu Gly Lys
                               265
Ile Ser Ser Ile Phe Tyr Thr Asn Thr Val Pro Leu Leu Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Leu Ile Lys Thr
                       295
Leu Ser Lys Arg Lys Arg
<210> 1629
<211> 311
<212> PRT
<213> Mus musculus
<400> 1629
Met Ala Phe Gly Asn Arg Ser Phe Val Thr Glu Phe Ile Leu Ile Gly
Leu Thr Asp Gln Pro Asn Leu Gln Leu Pro Leu Phe Phe Leu Phe Leu
                               25
Val Met Tyr Ile Val Thr Met Thr Gly Asn Leu Gly Leu Val Ile Leu
                           40
```

Ile Gly Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe

Asn Leu Ser Leu Ile Asp Leu Cys Tyr Ser Ser Val Phe Thr Pro Lys

55

```
Met Leu Leu Asn Phe Ile Leu Asn Lys Asn Ile Ile Ser Tyr Thr Gly
                                   90
Cys Met Thr Gln Leu Tyr Phe Tyr Ser Phe Phe Val Ile Ser Glu Cys
                               105
Tyr Val Leu Met Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                           120
Pro Leu Leu Tyr Asn Ile Ala Met Thr Pro Lys Ile Cys Ser Tyr Leu
                       135
Met Leu Gly Ser Tyr Leu Met Ala Phe Ser Gly Ala Met Ala His Thr
                   150
                                       155
Gly Cys Met Leu Arg Leu Thr Phe Cys Asp Ala Asn Thr Ile Asn His
               165
                           170
Tyr Phe Cys Asp Ile Leu Pro Val Met Gln Leu Ser Cys Thr Ser Thr
           180
                               185
Tyr Val Asn Glu Leu Glu Val Phe Ile Val Val Gly Ile Asn Ile Leu
                           200
Val Pro Ser Ile Thr Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser Ser
                       215
Ile Phe His Ile Asn Ser Asn Glu Gly Arg Ser Lys Ala Phe Ser Thr
                   230
                                        235
Cys Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Gly Ala
               245
                                   250
Phe Met Tyr Leu Lys Pro Ser Ser Ala Gly Ser Met Asp Glu Gly Lys
                               265
Ile Ser Ser Val Phe Tyr Thr Asn Val Val Pro Met Met Asn Pro Leu
                           280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg Ile Thr
                       295
Leu Ser Arg Trp Lys Leu Leu
```

<210> 1630 <211> 309 <212> PRT <213> Mus musculus

<400> 1630

Met Asp Ser Val Asn Val Ser Leu Val Thr Glu Phe Leu Leu Val Gly 10 Leu Thr His Gln Pro Asp Leu Gln Ile Pro Leu Phe Leu Leu Phe Leu 25 Ala Met Tyr Leu Val Thr Ala Leu Gly Asn Leu Gly Leu Ile Ile Leu 40 4.5 Val Leu Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe 55 Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Ser Val Phe Ala Pro Lys 75 Met Leu Met Asn Phe Ile Leu Arg Gln Asn Ala Ile Ser Tyr Met Gln 85 Cys Met Thr Gln Leu Tyr Phe Phe Phe Phe Phe Val Val Ser Glu Cys 105 Phe Val Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Phe Leu Tyr Asn Val Met Ile Ser Pro Gln Val Cys Leu Asn Leu 135 Met Ile Gly Ser Tyr Leu Met Ala Phe Ser Glu Ala Val Val Leu Thr

```
145
                   150
                                       155
Val Cys Met Leu Thr Leu Thr Phe Cys Asp Gly Asn Ile Asn His Tyr
               165
                                   170
Phe Cys Asp Ile Leu Ala Leu Phe Gln Leu Ser Cys Ser Ser Thr Tyr
            180
                                185
Val Asn Lys Leu Val Ala Tyr Val Ile Val Val Ile Asn Ile Leu Phe
                            200
Ser Thr Pro Ala Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser Ser Ile
                       215
                                           220
Phe Arg Ile Ser Ser Lys Gly Arg Ser Lys Ala Phe Ser Thr Cys
                   230
                                        235
Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Arg Ala Phe
               245
                                   250
Val Tyr Phe Lys Pro Ser Ser Pro Gly Ser Met Glu Trp Ala Lys Ile
                               265
           260
Ser Ser Val Phe Tyr Thr Asn Val Val Pro Met Met Asn Pro Leu Ile
                           280
Tyr Ser Leu Lys Asn Lys Asp Val Lys Ile Ala Leu Arg Lys Ser Leu
                        295
Ala Arg Trp Lys Ile
305
```

<211> 310

<212> PRT

<213> Mus musculus

<400> 1631

Met Ala Pro Ala Asn Val Ser Leu Val Thr Glu Phe Ile Leu Val Gly 10 Leu Thr Asn Gln Pro Asp Leu Gln Ile Pro Leu Phe Phe Val Phe Leu 20 25 Ile Met Tyr Ile Val Thr Ala Leu Gly Asn Leu Cys Leu Ile Ile Leu Ile Val Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe 5.5 60 Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Thr Val Phe Thr Pro Lys Met Leu Met Asn Phe Ile Leu Ser Lys Asn Ala Ile Ser Tyr Met Gly 85 90 Cys Leu Thr Gln Leu Tyr Phe Phe Cys Phe Phe Val Ile Ser Glu Cys 100 105 Tyr Val Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Leu Tyr Thr Val Ala Met Ser Pro Lys Leu Cys Leu Asn Leu 135 Met Leu Gly Thr Tyr Ala Met Ala Phe Ser Gly Ala Met Ala His Thr 150 155 Gly Cys Met Leu Arg Leu Thr Phe Cys Asp Ala Asn Thr Ile Asn His 165 170 Tyr Phe Cys Asp Ile Leu Pro Val Met Gln Leu Ser Cys Thr Ser Thr 185 Tyr Val Asn Glu Leu Val Val Phe Ile Val Val Gly Ile Asn Ile Ile 200 205 Val Pro Ser Ile Thr Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser Ser 215 220

```
      Ile
      Phe
      His
      Ile
      Lys
      Ser
      Asn
      Glu
      Gly
      Arg
      Ser
      Lys
      Ala
      Phe
      Ser
      Thr
      240

      Cys
      Ser
      Ser
      His
      Ile
      Ile
      Ala
      Val
      Cys
      Leu
      Phe
      Phe
      Gly
      Ser
      Gly
      Ala

      Phe
      Met
      Tyr
      Leu
      Lys
      Pro
      Ser
      Ser
      Ser
      Ser
      Met
      Asp
      Gly
      Lys

      Thr
      Ser
      Ser
      Val
      Phe
      Asp
      Pro
      Leu
      Lys
      Pro
      Leu
      Lys
      Pro
      Leu
      Asp
      Lys
      Thr
      Lys
      Thr
      Asp
      Val
      Lys
      Ile
      Ala
      Leu
      Arg
      Lys
      Thr

      Leu
      Ser
      Arg
      Arg
      Asp
      Lys
      Asp
      Val
      Lys
      Ile
      Ala
      Leu
      Arg
      Lys
      Thr

      Leu
      Ser
      Arg
      Trp
      Lys
      Phe
      Lys
      Ile
      Ala
      Leu
      Arg
      L
```

<210> 1632 <211> 310 <212> PRT <213> Mus musculus

<400> 1632

Met Glu Lys Ala Val Leu Ile Asn Glu Thr Ser Val Met Ser Phe Arg 10 Leu Thr Gly Leu Ser Thr Asn Pro Leu Val Gln Met Ala Val Phe Phe 2.0 25 Ile Phe Leu Ile Phe Tyr Val Leu Thr Leu Val Gly Asn Ile Leu Ile 40 Val Ile Thr Ile Ile Tyr Asp Arg Arg Leu His Thr Pro Met Tyr Phe 55 Phe Leu Ser Asn Leu Ser Phe Ile Asp Val Cys His Ser Thr Val Thr 70 75 Val Pro Lys Met Leu Ser Asp Thr Phe Ser Glu Glu Lys Leu Ile Ser 85 90 Phe Asp Ala Cys Val Val Gln Met Phe Phe Leu His Leu Phe Ala Cys 100 105 Thr Glu Ile Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala 120 Ile Cys Lys Pro Leu Gln Tyr Met Thr Ile Met Asn Trp Lys Val Cys 135 140 Met Met Leu Ala Ala Leu Trp Thr Gly Gly Thr Ile His Ser Ile 150 155 Ser Leu Thr Ser Leu Thr Ile Lys Leu Pro Tyr Cys Gly Pro Asp Glu 165 170 Ile Asp Asn Phe Phe Cys Asp Val Pro Gln Val Ile Lys Leu Ala Cys 180 185 Thr Asp Thr His Ile Ile Glu Ile Leu Ile Val Ser Asn Ser Gly Leu 200 Ile Ser Val Val Cys Phe Val Val Leu Val Val Ser Tyr Ala Val Ile 215 220 Leu Val Ser Leu Arg Gln Gln Ile Ser Asp Gly Lys Arg Lys Ala Leu 230 235 Ser Thr Cys Ala Ala His Leu Thr Val Val Thr Leu Phe Leu Gly His 245 250 Cys Ile Phe Ile Tyr Ser Arg Pro Ser Thr Ser Leu Pro Glu Asp Lys 265 Val Val Ser Val Phe Phe Thr Ala Val Thr Pro Leu Leu Asn Pro Ile 280 285 Ile Tyr Thr Leu Arg Asn Glu Asp Met Lys Ser Ala Leu Asn Lys Leu

<210> 1633 <211> 308 <212> PRT <213> Mus musculus

<400> 1633

Met Gly Ala Leu Asn Gln Thr Arg Val Thr Glu Phe Ile Phe Leu Gly 10 Leu Thr Asp Asn Trp Val Leu Glu Ile Leu Phe Phe Val Pro Phe Thr 25 20 Val Thr Tyr Met Leu Thr Leu Leu Gly Asn Phe Leu Ile Val Val Thr Ile Val Phe Thr Pro Arg Leu His Asn Pro Met Tyr Phe Phe Leu Ser 55 Asn Leu Ser Phe Ile Asp Ile Cys His Ser Ser Val Thr Val Pro Lys 70 75 Met Leu Glu Gly Leu Leu Glu Arg Lys Thr Ile Ser Phe Asp Asn 85 90 Cys Ile Ala Gln Leu Phe Phe Leu His Leu Phe Ala Cys Ser Glu Ile 100 105 Phe Leu Leu Thr Ile Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ile 120 Pro Leu His Tyr Ser Asn Val Met Asn Met Lys Val Cys Val Gln Leu 135 140 Val Phe Ala Leu Trp Leu Gly Gly Thr Ile His Ser Leu Val Gln Thr 150 155 Phe Leu Thr Ile Arg Leu Pro Tyr Cys Gly Pro Asn Ile Ile Asp Ser 165 170 Tyr Phe Cys Asp Val Pro Pro Val Ile Lys Leu Ala Cys Thr Asp Thr 185 Tyr Leu Thr Gly Ile Leu Ile Val Ser Asn Ser Gly Thr Ile Ser Leu 195 200 205 Val Cys Phe Leu Ala Leu Val Thr Ser Tyr Thr Val Ile Leu Phe Ser 215 220 Leu Arg Lys Lys Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys 230 235 Ser Ala His Phe Met Val Val Thr Leu Phe Phe Gly Pro Cys Ile Phe 250 245 Leu Tyr Thr Arg Pro Asp Ser Ser Phe Ser Ile Asp Lys Val Val Ser 260 265 Val Phe Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Leu Ile Tyr Thr 280 285 Leu Arg Asn Glu Glu Val Lys Thr Ala Met Lys His Leu Arg Gln Arg 290 295 Arg Ile Cys Ser 305

<210> 1634

<211> 314

<212> PRT

<213> Mus musculus

```
<400> 1634
Met Ser Gln Lys Arg Met Ala Pro Arg Asn Ser Ser Ser Val Thr Glu
                                    10
Phe Ile Leu Val Gly Phe Ser Asn Gln Pro Ala Leu Gln Leu Pro Leu
Phe Phe Val Phe Leu Gly Ile Tyr Val Leu Thr Val Ile Gly Asn Leu
                            40
Gly Leu Ile Thr Leu Ile Gly Leu Asn Ser Ser Leu His Thr Pro Met
                        55
Tyr Phe Phe Leu Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Cys
                   70
                                        75
Val Phe Thr Pro Lys Met Leu Ser Asp Phe Val Ser Glu Asn Ile Ile
                                    90
                85
Ser Tyr Met Gly Cys Met Thr Gln Leu Phe Phe Cys Phe Phe Val
           100
                                105
Asn Ser Glu Cys Tyr Val Leu Val Ser Met Ala Tyr Asp Arg Tyr Val
                            120
                                                125
Ala Ile Cys Asn Pro Leu Leu Tyr Thr Val Thr Met Ser Pro Gln Val
                        135
Cys Thr Leu Leu Met Phe Cys Ser Tyr Val Ile Gly Phe Ala Gly Ala
                   150
                                        155
Met Ala His Thr Gly Ser Met Leu Thr Leu Thr Phe Cys Asp Ser Asn
                                    170
Met Ile His His Tyr Leu Cys Glu Val Leu Pro Leu Leu Gln Leu Ser
           180
                                185
Cys Thr Ser Thr Tyr Ala Asn Glu Leu Val Phe Phe Ile Val Val Gly
                            200
                                                205
Val Val Ile Thr Ala Ser Ser Ile Ser Ile Phe Ile Ser Tyr Ala Leu
                        215
                                            220
Ile Leu Ser Asn Ile Leu Lys Ile Pro Ser Ala Glu Gly Arg Ser Lys
                    230
                                        235
Ala Phe Gly Thr Cys Gly Ser His Val Val Ala Val Ala Leu Phe Phe
                245
                                    250
Gly Ser Gly Ala Phe Thr Tyr Leu Thr Thr Ser Phe Pro Gly Ser Met
            260
                                265
                                                    270
Glu Glu Gly Arg Phe Ala Ser Val Phe Tyr Thr Asn Val Val Pro Met
                            280
Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Leu Ala
                        295
                                            300
Leu Asn Lys Thr Leu Lys Arg Val Leu Phe
                    310
<210> 1635
<211> 316
```

<212> PRT

<213> Mus musculus

<400> 1635

Met Ala Lys Asn Asn Ile Thr Thr Val Thr Glu Phe Ile Leu Ile Gly 10 Phe Asn Asp His Pro Lys Trp Glu Ile Pro Leu Leu Val Phe Leu 25 Ser Phe Tyr Leu Val Thr Met Leu Gly Asn Leu Gly Met Val Ile Leu 40 Ile His Val Asp Val Gln Leu His Ile Pro Met Tyr Phe Phe Leu Ser

```
50
                       55
His Leu Ser Val Leu Asp Ala Cys Tyr Thr Ser Val Ile Thr Pro Gln
                   70
                                       75
Ile Leu Ala Thr Leu Ala Thr Gly Lys Thr Val Ile Ser Tyr Arg Cys
                                    90
Cys Ala Ala Gln Phe Phe Phe Thr Ile Cys Ala Ala Thr Glu Cys
            100
                                105
Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser Asn
       115
                           120
Pro Leu Leu Tyr Thr Val Ala Met Gly Pro Arg Lys Cys Trp Ser Leu
                       135
Val Val Gly Ala Tyr Ile Cys Gly Val Cys Gly Ala Ile Leu Arg Thr
                   150
                                       155
Thr Cys Thr Phe Ser Leu Ser Phe Cys Glu Asn Asn Gln Ile Asn Phe
               165
                                  170
Phe Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr
           180
                              185
Thr Asn Ile Glu Ile Ile Ile Val Phe Phe Gly Asn Phe Val Ile Leu
                           200
Ala Asn Ala Leu Val Ile Leu Ile Ser Tyr Leu Leu Ile Ile Lys Ala
                        215
Val Met Arg Met Lys Ser Ser Gly Arg Arg Ala Lys Thr Phe Ser Thr
                   230
                                       235
Cys Val Ser His Leu Thr Ala Val Ala Leu Leu Phe Gly Thr Leu Ile
               245
                                   250
Phe Met Tyr Ile Arg Ser Gly Ser Lys Ser Leu Asp Glu Asp Lys
                               265
Val Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
       275
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ala Ala Phe Lys Lys Val
                       295
Thr Gly Lys Cys Gln Val Ser Gln Cys Thr Gln His
                   310
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1636

Met Asp Asn Asn Leu Thr Thr Val Thr Glu Phe Ile Leu Val Gly 10 Phe Thr Asp His Pro Glu Trp Glu Val Pro Leu Phe Leu Val Phe Leu 25 Cys Phe Tyr Leu Val Thr Ile Leu Gly Asn Leu Gly Met Val Ile Leu 35 Ile Gln Met Asp Val Gln Leu Gln Ser Pro Met Tyr Phe Phe Leu Ser 55 His Leu Ser Val Leu Asp Ala Cys Tyr Thr Ser Val Ile Thr Pro Gln 70 75 Ile Leu Ala Met Leu Ala Thr Gly Lys Thr Val Ile Ser Tyr Asn His 85 90 Cys Ala Ala Gln Phe Phe Phe Phe Thr Phe Cys Ala Ser Thr Glu Cys 105 110 Phe Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Ser Asn 120

Pro Leu Leu Tyr Thr Val Ala Met Ser Pro Lys Lys Cys Trp Ser Leu 135 Val Leu Val Ala Tyr Val Cys Gly Leu Ser Gly Ser Ile Gln Arg Thr 150 155 Thr Cys Thr Phe Ser Leu Ser Phe Cys Glu Asp Asn Lys Ile Asn Phe 170 Phe Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr 185 Thr Asn Ala Glu Ile Ile Ile Val Leu Phe Gly Asn Phe Val Ile Leu 200 Val Asn Ala Leu Val Ile Leu Thr Ser Tyr Leu Leu Ile Ile Lys Thr 215 220 Val Met Arg Ile Lys Ser Ser Gly Gly Arg Gly Lys Thr Phe Ser Thr 230 235 Cys Val Ser His Leu Thr Ala Val Ala Leu Phe Phe Gly Thr Leu Thr 245 250 Phe Met Tyr Ile Arg Ser Gly Ser Gly Lys Ser Pro Glu Glu Asp Lys 265 Val Val Ser Val Phe Tyr Thr Val Ile Ile Pro Met Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ala Gly Phe Arg Lys Leu 295 Thr Ser Arg Leu Gln Val Ser Gln Ser Val . 310

<210> 1637 <211> 310

<212> PRT

<213> Mus musculus

<400> 1637

Met Lys Asn Gln Ser Gly Glu Leu Glu Phe Ile Leu Leu Gly Leu Thr Asp Asp Pro Gln Leu Gln Ile Leu Ile Phe Leu Phe Leu Phe Asn 25 Tyr Ile Leu Ser Met Met Gly Asn Leu Thr Ile Ile Leu Leu Thr Leu 40 Leu Asp Pro His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe 55 Ser Phe Ile Glu Ile Ala Phe Thr Thr Val Cys Ile Pro Arg Phe Leu 70 75 Ile Ser Ile Leu Ser Gly Asp Arg Thr Ile Ser Tyr Asn Ala Cys Ala 90 85 Ala Gln Leu Phe Phe Val Phe Leu Leu Gly Ser Thr Glu Phe Tyr Leu 105 Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu 120 125 His Tyr Pro Ile Ile Met Asn Ser Lys Val Cys His Leu Leu Val Leu 135 140 Ser Ser Trp Val Thr Gly Phe Leu Ile Ile Phe Pro Pro Leu Leu Leu 150 155 Gly Leu Lys Leu Asp Phe Cys Thr Ser Gly Ala Met Asp His Phe Leu 165 170 Cys Asp Pro Ser Pro Val Leu Gln Leu Ser Cys Thr Asp Thr Gln Leu 185 Ile Glu Leu Met Thr Phe Val Leu Ala Ile Met Thr Leu Ile Ile Thr

195 200 205 Leu Ile Leu Val Ile Leu Ser Tyr Thr Leu Ile Ile Lys Thr Ile Leu 215 220 Lys Phe Pro Ser Ala Gln Gln Arg Arg Lys Ala Phe Ser Thr Cys Ser 230 235 Ser His Met Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Met 250 245 Tyr Val Lys Thr Ser Ala Lys Glu Arg Val Thr Leu Asn Lys Gly Val 265 Ala Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr 280 285 Thr Leu Arg Asn Gln Gln Val Lys Asp Ala Phe Lys His Met Leu His 295 Arg Phe Cys Thr Lys Gln <210> 1638 <211> 306 <212> PRT

<400> 1638

<213> Mus musculus

Met Ser Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Gln Asp Pro 10 Asp Leu Gln Lys Leu Leu Phe Ile Val Cys Leu Ile Ile Tyr Leu Ile 25 Thr Leu Ala Gly Asn Met Leu Ile Ser Val Thr Ile Phe Ile Ser Pro 40 Ala Leu Ala Thr Pro Met Tyr Phe Phe Leu Ser Tyr Leu Ser Ile Ile 55 Asp Gly Phe Tyr Ser Ser Ser Ile Ala Pro Lys Met Ile Tyr Asp Leu 75 70 Ile Ser Glu Lys Ser Thr Ile Ser Phe Asn Gly Cys Met Thr Gln Leu 85 Phe Ala Glu His Phe Phe Ala Ala Asp Glu Ile Ile Leu Leu Ile Ala 100 105 Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Met 120 Thr Ile Met Ser Gln Pro Leu Cys Val Phe Leu Val Gly Ala Ala Val 135 140 Ile Leu Gly Phe Ile His Gly Ala Ile Gln Thr Leu Phe Met Ala Gln 155 150 Leu Pro Phe Cys Gly Pro Asn Thr Ile Asn His Phe Met Cys Asp Leu 170 Ile Pro Leu Glu Leu Ala Cys Thr Asp Thr His Thr Leu Gly Pro 180 . 185 Leu Ile Ala Ala Asn Ser Gly Ser Leu Cys Leu Leu Thr Phe Ser Met 200 Leu Val Ala Ser Tyr Val Val Ile Leu Arg Ser Leu Arg Asn His Ser 215 220 Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ala Ser His Val Thr 230 235 Val Val Leu Phe Phe Val Pro Cys Ser Tyr Leu Tyr Leu Arg Pro 250 245 Met Thr Ser Phe Pro Thr Asp Lys Ala Val Thr Val Phe Cys Thr Leu 260 265

Val Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Glu Glu 280 Val Lys Arg Val Met Lys Lys Leu Trp Gly Arg Met Arg Lys Ala Gly 290 295 Asp Met 305 <210> 1639 <211> 305 <212> PRT <213> Mus musculus <400> 1639 Met Val His Glu Asn Asn Val Thr Glu Leu Ile Phe Thr Gly Leu Phe Gln Asp Pro Glu Val Gln Lys Val Cys Phe Val Leu Phe Leu Pro Val Tyr Leu Ala Thr Leu Leu Gly Asn Gly Leu Ile Phe Val Thr Val Ser Ile Ser Lys Thr Leu His Ser Pro Met Tyr Phe Phe Leu Ser Ser Leu 55 60 Ser Leu Val Glu Ile Cys Tyr Ser Ser Thr Val Ala Pro Lys Phe Ile 75 Thr Asp Leu Leu Ala Lys Val Lys Thr Ile Ser Leu Lys Gly Cys Leu 85 90 Thr Gln Ile Phe Phe His Phe Phe Gly Val Val Glu Ile Ile Leu 105 100 Leu Val Met Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Met Ile Ile Met Ser Arg Gln Val Cys His Met Leu Val Ala 135 Gly Ser Trp Leu Gly Gly Leu Ile His Ser Ile Ile Gln Ile Ile Ile 150 Thr Ile Pro Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe 165 170 Cys Asp Leu His Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr Phe Met 185 Glu Arg Phe Ile Val Met Ala Asn Ser Gly Leu Phe Ser Ile Ile Ser 195 200 205 Leu Phe Ile Leu Val Ser Ser Tyr Ala Val Ile Leu Ile Ser Leu Arg 215 220 Lys Arg Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ala Ser 230 235 His Ile Thr Val Val Ile Leu Tyr Phe Gly Pro Gly Ala Phe Ile Tyr 245 250 Met Arg Pro Ser Ser Ala Phe Thr Glu Asp Lys Leu Val Ser Val Phe 265 Tyr Thr Val Ile Thr Pro Met Leu Asn Pro Ile Val Tyr Thr Leu Arg 280 285

Asn Thr Glu Met Lys Asn Ala Ile Arg Met Phe Trp Ser Gln Lys Asp

Lys 305

```
<212> PRT
<213> Mus musculus
<400> 1640
Met Gly Glu Arg Asn Asn Val Thr Glu Phe Val Leu Leu Gly Leu Thr
                                    10
Gln Asp Pro Ala Gly Gln Lys Val Leu Phe Val Met Phe Leu Leu Ile
                               25
Tyr Ile Val Thr Met Val Gly Asn Leu Leu Ile Val Leu Thr Val Ile
                           40
Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Cys Leu
Ser Phe Leu Asp Ile Val Tyr Ser Thr Ser Ile Ser Pro Lys Leu Ile
                   7.0
                                       75
Met Asp Leu Cys Asp Glu Lys Ser Ile Ser Phe Thr Ala Cys Met
Ser Gln Leu Phe Ile Glu His Leu Phe Gly Gly Thr Glu Ile Val Ile
                               105
Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                            120
His Tyr Leu Thr Ile Met Asn Arg Lys Val Cys Ile Ile Leu Leu Gly
                       135
Phe Ser Trp Val Gly Gly Phe Thr His Ser Met Ile Gln Ile Leu Phe
                  150
                                       155
Val Phe Asn Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Phe Met
               165
                                   170
Cys Asp Met Ser Pro Leu Leu Gly Leu Val Cys Thr Asp Thr Tyr Phe
           180
                               185
                                                   190
Ile Gly Leu Thr Leu Ile Ala Lys Gly Gly Ala Met Cys Ile Val Val
                           200
                                               205
Phe Ile Leu Leu Ile Val Ser Tyr Gly Ile Ile Leu Arg Ser Leu Lys
                        215
                                            220
Asn Tyr Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                    230
                                        235
His Ile Met Val Val Thr Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
               245
                                   250
Ala Arg Pro Val Tyr Asn Phe Ser Ser Asp Lys Tyr Ile Thr Val Phe
                               265
Tyr Thr Val Phe Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                                               285
                           280
Asn Ser Glu Met Lys Asn Ser Met Gln Lys Leu Trp Cys Thr Leu Leu
                       295
Thr Met Asp Arg Ile Arg Leu Ser Cys Tyr
                    310
<210> 1641
<211> 307
<212> PRT
<213> Mus musculus
<400> 1641
Met Gly Gln Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
                                   10
Gln Asp Pro Ala Gly Gln Lys Val Leu Phe Val Met Phe Leu Leu Ile
            20
                                25
```

<211> 314

```
Tyr Ile Val Lys Ile Val Gly Asn Leu Leu Ile Val Gly Thr Val Ile
Ala Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Phe Leu
Ser Leu Met Asp Ala Val Tyr Ser Thr Ala Ile Leu Pro Lys Leu Leu
Thr Asp Leu Leu Cys Asp Lys Lys Thr Ile Ser Phe Thr Ala Cys Leu
               85
                                    90
Val Gln Leu Phe Val Glu His Leu Phe Gly Gly Ser Glu Val Phe Ile
                                105
Leu Val Val Met Ala Tyr Asp His Tyr Val Ala Ile Cys Lys Pro Leu
                           120
His Tyr Leu Thr Ile Met Lys Arg Gln Val Cys Ile Leu Leu Val Val
                       135
                                           140
Val Ser Trp Ala Gly Gly Phe Val His Ala Leu Leu Gln Ala Ile Ser
                                       155
Val Tyr Leu Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ala
                                    170
                165
Cys Asp Ile Tyr Pro Leu Leu Gly Leu Ala Cys Thr Asp Thr Tyr Phe
                                185
                                                    190
Leu Gly Leu Thr Val Val Ser Ser Tyr Gly Ala Met Ser Ile Val Ala
                           200
                                                205
Phe Ile Leu Leu Val Ser Tyr Gly Ile Ile Leu Asn Ser Leu Lys
                       215
                                            220
Thr His Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                   230
                                        235
His Ile Met Val Val Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
                                   250
               245
Val Arg Pro Val Ser Asn Phe Pro Ile Asp Lys Tyr Ile Thr Val Phe
                               265
Tyr Thr Val Phe Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                           280
                                                285
Asn Met Glu Ile Lys Asn Cys Met Ala Lys Leu Trp Ser Lys Met Phe
                       295
Thr Lys Ala
305
```

<210> 1642 <211> 315 <212> PRT

<213> Mus musculus

<400> 1642

 Met
 Gly
 Gln
 Arg
 Asn
 Asn
 Val
 Thr
 Glu
 Phe
 Ile
 Leu
 Leu
 Gly
 Leu
 Thr

 Gln
 Asp
 Pro
 Ala
 Gly
 Gly
 Leu
 Phe
 Val
 Met
 Phe
 Leu
 Ile
 Leu
 Ile
 Leu
 Ile
 Val
 Ala
 Thr
 Val
 Ile
 Val
 Val
 Ile

```
100
                               105
Leu Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
       115
                           120
                                              125
His Tyr Leu Thr Ile Met Asn Arg Gln Ile Cys Ile Leu Leu Leu Val
                       135
                                           140
Ile Ala Trp Val Gly Gly Phe Val His Ser Val Ile Gln Leu Ala Phe
                   150
Val Ser Thr Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ile
               165
                                   170
Cys Asp Met Tyr Pro Leu Leu Thr Leu Ala Cys Ser Asp Thr Tyr Phe
                               185
Ile Gly Leu Thr Val Val Ala Asn Gly Gly Ala Ile Cys Met Val Ile
       195
                           200
Leu Ile Leu Leu Ile Ser Tyr Val Phe Ile Leu Asn Ser Leu Lys
                       215
                                          220
Asn Tyr Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                   230
                                       235
His Ile Thr Val Val Leu Phe Phe Val Pro Cys Ile Phe Ile Tyr
               245
                                   250
Val Arg Pro Val Ser Asn Phe Pro Ile Asp Lys Ser Ile Ser Val Val
                               265
Phe Thr Val Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                           280
                                               285
Asn Ser Glu Met Lys Ile Ala Met Gln Lys Leu Trp Cys Lys Thr Ala
                      295
Thr Thr Gly Arg Val Arg Val His Ser Pro His
                   310
```

<210> 1643

<211> 305

<212> PRT

<213> Mus musculus

<400> 1643

Met Glu Asn Ala Asn Asn Val Thr Glu Phe Ile Leu Val Ser Ile Thr 10 Lys Ile Pro Glu Leu Arg Ile Leu Phe Ser Ala Leu Phe Leu Ile Met 25 Tyr Val Ala Thr Leu Leu Gly Asn Leu Leu Ile Ile Val Thr Val Thr 40 Val Ser Pro Asn Leu Arg Ser Pro Met Tyr Phe Phe Leu Ile Ser Leu Ser Leu Leu Asp Val Ile Tyr Ser Ser Val Thr Ala Pro Lys Leu Ile 70 75 Val Asp Ser Leu Ser Glu Asn Thr Thr Ile Ser Leu Glu Gly Cys Met Thr Gln Leu Phe Ala Glu His Phe Phe Gly Gly Val Glu Ile Ile Leu 105 Leu Ile Val Met Ala Tyr Asp Ser Tyr Val Ala Ile Cys Lys Pro Leu 115 120 125 His Tyr Thr Thr Ile Val Ser Pro Arg Val Cys Trp Leu Met Val Gly 135 Gly Ala Trp Val Gly Gly Phe Ala His Gly Thr Ile Gln Leu Leu Phe 150 155 Met Tyr Gln Ile Pro Phe Cys Gly Pro Asn Val Ile Asp His Val Ile 170

```
Cys Asp Leu Phe Pro Leu Leu Gln Leu Ala Cys Met Asp Thr His Ile
           180
                               185
Leu Ala Leu Leu Val Ile Leu Asn Ser Gly Val Met Cys Val Thr Ile
                           200
Phe Leu Ile Leu Ile Thr Ser Tyr Val Val Ile Leu Cys Ser Leu Lys
Ser Ser Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                                       235
                   230
His Phe Thr Val Val Leu Phe Phe Val Pro Cys Ile Ile Leu Tyr
               245
                                   250
Met Arg Pro Val Val Thr Tyr Pro Ile Asp Asn Ala Met Ala Leu Cys
           260
                               265
Ala Thr Ile Phe Glu Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg
                           280
                                               285
Asn Ala Glu Val Lys His Ala Leu Arg Lys Leu Trp Met Lys Arg Gly
                       295
                                           300
Pro
305
<210> 1644
<211> 307
<212> PRT
<213> Mus musculus
<400> 1644
Met Gly Glu Lys Ser Asn Ile Thr Glu Phe Ile Leu Leu Gly Leu Thr
                                   10
Gln Asp Pro Ala Gly Arg Lys Ile Leu Phe Phe Ile Phe Leu Leu Ile
                               25
           20
Tyr Ile Val Thr Met Val Gly Asn Leu Leu Ile Val Val Thr Val Ile
Thr Ser Pro Ser Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Ser Leu
                       55
Ser Leu Leu Asp Ala Leu Phe Ser Thr Ala Ile Ser Pro Lys Leu Ile
                                        75
Val Asp Leu Phe Cys Asp Gln Lys Thr Ile Ser Phe Thr Ala Cys Ile
               85
                                   90
Ser Gln Leu Phe Ile Glu His Leu Phe Gly Gly Val Asp Ile Val Ile
                               105
           100
Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                           120
His Tyr Leu Ala Ile Met Asn Arg Arg Val Cys Ile Thr Leu Leu Ile
                       135
   130
                                           140
Ile Ala Trp Thr Gly Gly Phe Thr His Ser Leu Ile Gln Ile Val Phe
                   150
                                       155
Val Tyr Asn Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ile
               165
                                   170
Cys Asp Met Ser Pro Leu Leu Val Leu Ala Cys Thr Asp Thr Tyr Phe
           180
                               185
                                                    190
Ile Gly Leu Thr Val Ile Ala Asn Gly Gly Ala Met Cys Ile Val Ile
                           200
                                               205
Phe Thr Leu Leu Gly Ser Tyr Gly Ile Ile Leu Lys Ser Leu Lys
                       215
                                            220
Thr His Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                  230
                                       235
```

His Ile Leu Val Val Ile Leu Phe Phe Val Pro Cys Ile Phe Met Tyr

245 250 Ala Arg Pro Val Tyr Asn Phe Pro Ile Asp Lys Cys Ile Thr Val Phe 265 Tyr Thr Ile Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg 280 Asn Ser Glu Met Lys Thr Cys Met Lys Lys Leu Trp Cys Lys Ile Leu 295 Pro Ala Asp 305 <210> 1645 <211> 310 <212> PRT <213> Mus musculus <400> 1645 Met Ala Leu Ile Asn Gly Ser Val Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Asp Gln Pro Asp Leu Gln Val Pro Leu Phe Leu Val Phe Leu 25 Leu Met Tyr Met Ile Thr Ala Leu Gly Asn Leu Thr Leu Ile Ile Leu 40 Ile Val Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe 55 Asn Leu Ser Phe Val Asp Phe Cys Tyr Ser Ser Val Ile Ile Pro Lys 70 75 Met Leu Met Ash Phe Ile Leu Lys Lys Asn Phe Ile Ser Tyr Val Gly 90 85 Cys Met Thr Gln Phe Tyr Leu Phe Gly Phe Cys Val Ile Leu Glu Cys 105 Tyr Ile Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Leu Tyr Asn Ile Val Met Ser Pro Lys Leu Cys Ser Tyr Leu 135 140 Met Leu Gly Ser Tyr Leu Met Gly Phe Ser Gly Ala Met Ile His Thr 150 155 Gly Cys Val Leu Arg Leu Ser Phe Cys Asp Gly Asn Ile Ile Asn His 165 170 Tyr Phe Cys Asp Leu Leu Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr 180 185 190 Tyr Val Asn Glu Ile Glu Val Leu Ile Val Ala Gly Lys Asp Ile Ile 200 Val Pro Thr Val Ile Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser Ser 215 220 Ile Phe Gln Met Lys Ser Thr Lys Gly Met Ser Lys Ala Phe Ser Thr 235 230 Cys Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Gly Ala 250 Phe Met Tyr Leu Lys Pro Asn Ser Thr Gly Thr Met Asn Asn Gly Lys 265 Ile Pro Ser Ile Ile Tyr Thr Ile Leu Ile Pro Met Met Asn Pro Leu 280 285 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg Lys Thr 290 295 Leu Arg Lys Lys Ile Leu 310

```
<211> 316
<212> PRT
<213> Mus musculus
<400> 1646
Met Ala Leu Ala Asn Gly Ser Phe Val Thr Glu Phe Ile Leu Leu Gly
                                   10
Leu Thr Asp Gln Pro Asp Leu Gln Met Pro Leu Phe Leu Ile Phe Leu
           20
                                25
Ile Ile Tyr Leu Ile Thr Ala Phe Gly Asn Leu Thr Leu Ile Ile Leu
                            40
                                                45
Ile Val Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Phe
                        55
                                            60
Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Ser Leu Ile Thr Pro Lys
                                        75
                    70
Met Leu Met Asn Phe Val Leu Glu Lys Asn Ile Ile Ser Tyr Met Gly
Cys Met Thr Gln Phe Tyr Phe Phe Gly Phe Phe Ala Ile Ser Glu Cys
                                105
            100
Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Ser Val Ala Met Ser Pro Lys Met Cys Ser Tyr Leu
                       135
                                            140
Ile Leu Gly Ser Tyr Phe Met Gly Phe Ser Gly Ala Met Ile His Thr
                   150
                                        155
Gly Cys Val Met Arg Leu Thr Phe Cys Asp Gly Asn Thr Ile Asn His
               165
                                   170
Tyr Phe Cys Asp Leu Leu Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr
                               185
Tyr Val Asn Glu Ile Glu Leu Phe Ile Val Thr Gly Lys Asp Ile Ile
                            200
                                                205
Val Pro Thr Val Ile Ile Phe Ala Ser Tyr Gly Phe Ile Leu Ser Asn
                        215
                                            220
Ile Leu Lys Ile Arg Ser Thr Ser Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Ile Ile Ala Val Ser Met Phe Phe Gly Ser Ser Ala
               245
                                    250
Phe Met Tyr Leu Lys Pro Ser Ser Ala Val Ser Met Asn Glu Ala Lys
            260
                                265
Phe Ser Ser Ile Phe Tyr Ser Ile Val Val Pro Met Met Asn Pro Leu
       275
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Gly Leu Lys Lys Thr
                       295
Leu Ser Arg Met Phe Ser His Asn Leu Ile Ser Leu
305
                    310
<210> 1647
<211> 310
<212> PRT
```

Met Gly Ser Glu Asn Gly Ser Ser Val Thr Glu Phe Ile Leu Val Gly

<210> 1646

<213> Mus musculus

<400> 1647

```
10
Leu Thr Lys Asp Pro Asp Leu Gln Cys Pro Leu Phe Val Leu Phe Leu
                                25
Val Met Tyr Val Leu Thr Val Leu Gly Asn Leu Ser Leu Ile Thr Leu
Ile Val Leu Asn Ser His Leu Pro Thr Pro Met Tyr Phe Phe Leu Phe
                        55
Asn Leu Ser Leu Val Asp Phe Trp Tyr Ser Ser Val Phe Thr Pro Lys
                   70
                                        75
Met Leu Met Ser Phe Ile Ser Glu Lys Asn Ile Ile Ser Tyr Arg Gly
               85
                                   90
Cys Met Ala Gln Leu Phe Phe Phe Ser Phe Phe Cys Ile Ser Glu Cys
                               105
Tyr Val Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                           120
                                               125
Pro Leu Leu Tyr Asn Ile Val Met Ser Pro Lys Leu Cys Leu Asn Leu
                       135
Ile Leu Gly Ser Tyr Ile Met Ala Phe Ser Gly Ala Met Ala His Thr
                    150
                                        155
Gly Cys Met Leu Arg Leu Thr Phe Cys Asp Ala Asn Thr Ile Asn His
                165
                                   170
                                                        175
Tyr Phe Cys Asp Ile His Pro Leu Leu Gln Leu Ser Cys Thr Ser Ile
           180
                               185
Tyr Val Asn Glu Leu Glu Val Phe Val Val Ile Gly Ile Asn Ile Ile
                            200
                                                205
Val Pro Thr Ile Thr Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser Ser
                       215
                                            220
Ile Phe His Ile Ser Ser Lys Glu Gly Arg Ser Lys Ala Phe Ser Thr
                   230
                                        235
Cys Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Gly Ala
               245
                                    250
Phe Met Tyr Leu Lys Pro Ser Ser Ala Glu Ser Met Asn Glu Ser Lys
            260
                                265
Val Ser Ser Val Phe Tyr Thr Asn Thr Val Pro Leu Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ile Ala Leu Ile Lys Thr
                       295
Leu Ser Lys Arg Lys Cys
```

<210> 1648

<211> 310

<212> PRT

<213> Mus musculus

<400> 1648

 Met
 Asp
 Ser
 Val
 Asn
 Ile
 Ser
 Leu
 Val
 Thr
 Glu
 Phe
 Ile
 Leu
 Val
 Gly

 Leu
 Thr
 Asp
 Lys
 Pro
 Tyr
 Leu
 Gln
 Ile
 Pro
 Leu
 Phe
 Phe
 Ile
 Phe
 Leu

 Ala
 Met
 Tyr
 Leu
 Val
 Thr
 Ala
 Leu
 Gly
 Asn
 Leu
 Ser
 Leu
 Ile
 Phe
 Leu

 Thr
 Val
 Leu
 Asn
 Ser
 His
 Leu
 His
 Thr
 Pro
 Met
 Tyr
 Phe
 Phe
 Leu
 Phe

 Thr
 Val
 Leu
 Asp
 Phe
 Cys
 Tyr
 Ser
 Ser
 Val
 Phe
 Thr
 Phe
 Gln

 Asn
 Leu
 Ser
 Phe
 Cys
 Tyr
 Ser
 Ser
 Val
 Phe
 Thr
 Phe
 Gln

 Asn
 Leu
 Fee
 Cys
 Tyr
 Ser
 Ser
 Val
 Phe
 T

```
Met Leu Met Asn Phe Ile Thr Arg Lys Asn Thr Ile Ser Tyr Met Glu
                85
                                   90
Cys Met Ser Gln Leu Tyr Phe Phe Cys Phe Phe Val Ile Ser Glu Cys
                               105
Tyr Val Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                           120
Pro Leu Leu Tyr Asn Leu Val Met Ser Ser Lys Leu Cys Leu Asn Leu
                       135
Met Leu Val Ser Tyr Phe Ile Ala Phe Ser Glu Ser Val Ala His Thr
                   150
                                       155
Val Cys Ile Met Arg Leu Asn Phe Cys Asp Ala Asn Lys Ile Asn His
               165
                                 170
Tyr Phe Cys Asp Ile Pro Pro Leu Leu Gln Leu Ser Cys Thr Thr Thr
           180
                               185
                                                   190
Tyr Ile Asn Lys Leu Val Val Phe Val Ala Ser Ser Ile Asn Ile Ile
                           200
Val Pro Ile Ser Thr Ile Phe Ile Ser Tyr Gly Phe Ile Leu Ser Ser
                       215
                                            220
Ile Phe His Ile His Ser Ser Glu Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Ile Ile Ala Ala Phe Leu Phe Phe Gly Ser Gly Ala
                                   250
               245
Phe Met Tyr Phe Gln Pro Ser Ser Ala Glu Ser Met Asp Glu Gly Lys
                               265
Ile Ser Ser Val Phe Tyr Thr Asn Val Ile Pro Met Asn Pro Leu
                           280
                                               285
Leu Tyr Ser Leu Arg Asn Lys Asp Ile Lys Val Ala Leu Arg Lys Thr
                       295
Leu Ser Lys Arg Asn Ile
305
```

<210> 1649 <211> 308 <212> PRT

<213> Mus musculus

<400> 1649

Met Gly Thr Gly Asn His Ser Ala Ala Val Val Phe Val Leu Val Gly 10 Leu Thr Gln Gln Pro Glu Leu Leu Pro Leu Phe Ile Leu Phe Leu 25 Gly Ile Tyr Val Val Thr Ala Val Gly Asn Leu Gly Met Ile Leu Leu 40 45 Ile Thr Val Ser Pro Leu Leu His Thr Pro Met Tyr Tyr Phe Leu Ser 55 Ser Leu Ser Cys Val Asp Leu Cys Tyr Ser Thr Val Ile Thr Pro Lys 75 80 Met Leu Val Asn Phe Leu Gly Lys Lys Asn Val Ile Val Tyr Ser Glu 8.5 90 Cys Met Ala Gln Leu Phe Phe Phe Val Ile Phe Val Val Ala Glu Gly 105 Tyr Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg 120 125 Pro Leu Leu Tyr Asn Val Ile Met Ser Ser Arg Leu Cys Ser Leu Leu 135 Val Leu Val Ala Phe Ile Leu Gly Phe Val Ser Ala Leu Ala His Thr

```
145
                  150
                                      155
Ser Ala Met Met Asn Leu Ser Phe Cys Lys Ser His Ile Ile Ser His
              165
                                  170
Tyr Phe Cys Asp Val Leu Pro Leu Leu Asn Leu Ser Cys Ser Asn Thr
           180
                              185
His Leu Asn Glu Leu Leu Phe Ile Ile Gly Gly Phe Asn Thr Leu
                           200
Val Pro Thr Leu Ala Val Ala Ile Ser Tyr Val Phe Ile Phe Cys Ser
                      215
                                          220
Ile Leu His Ile Lys Ser Ser Lys Gly Arg Ser Lys Ser Phe Gly Thr
                  230
                                      235
Cys Ser Ser His Leu Met Ala Val Gly Ile Phe Phe Gly Ser Ile Thr
                                  250
               245
Phe Met Tyr Phe Lys Pro Ser Ser Ser Asn Ser Leu Glu Glu Glu Lys
          260
                              265
Val Ser Ser Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Leu
                          280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Lys Ala Leu Gly Arg Phe
                      295
Phe Val Gly Arg
305
```

<210> 1650 <211> 313 <212> PRT

<213> Mus musculus

<400> 1650

Met Ala Leu Val Asn Gly Ser Thr Val Thr Glu Phe Ile Leu Leu Gly 10 Leu Thr Asp Gln Pro Gly Leu Gln Met Pro Leu Phe Leu Phe Leu 25 Leu Met Tyr Met Ile Thr Val Phe Gly Asn Leu Thr Leu Ile Phe Leu 40 Ile Leu Leu Asn Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Leu 55 60 Asn Leu Ser Phe Val Asp Leu Cys Tyr Ser Ser Val Ile Thr Pro Lys 70 75 Met Leu Met Asn Phe Ile Leu Lys Lys Asn Leu Ile Ser Tyr Met Gly 85 90 Cys Met Ser Gln Leu Tyr Phe Phe Cys Phe Phe Ile Ile Ser Glu Cys 105 110 Tyr Val Leu Val Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 115 120 125 Pro Leu Leu Tyr Asn Thr Ala Met Ser Pro Arg Val Cys Ser Tyr Leu 135 Met Leu Gly Ser Tyr Leu Met Gly Phe Phe Asp Ala Met Ile His Thr 150 155 Gly Cys Met Leu Arg Leu Ser Phe Cys Asp Gly Asn Ile Ile Asn His 170 165 Tyr Phe Cys Asp Val Leu Pro Leu Leu Gln Leu Ser Cys Thr Ser Thr 185 Tyr Val Asn Glu Thr Glu Ile Phe Ile Val Gly Gly Lys Asp Ile Ile 200 Leu Pro Ser Ala Ile Ile Phe Phe Ser Tyr Gly Phe Ile Leu Ser Asn 215 220

```
Ile Phe Gln Ile Arg Ser Thr Leu Gly Arg Ser Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ser Ser His Ile Ile Ala Val Ser Leu Phe Phe Gly Ser Cys Gly
               245
                                  250
Phe Met Tyr Leu Lys Pro Ser Ser Ala Val Ser Ile Asp Gln Gly Lys
           260
                               265
Ile Ser Ser Ile Phe Tyr Thr Ile Val Val Pro Met Met Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Arg Lys Thr
                      295
Leu Ser Arg Arg Lys Phe Leu Lys Val
     , 310
```

<210> 1651 <211> 311 <212> PRT <213> Mus musculus

<400> 1651 Met Asp Thr Lys Asn Ile Ser Phe Ile Thr Glu Phe Ile Leu Val Gly 10 Leu Thr Glu Tyr Thr Glu Thr His Phe Pro Phe Phe Leu Phe Leu 25 Gly Ile Tyr Ala Ile Thr Val Ala Gly Asn Leu Gly Leu Leu Thr Leu 4.0 Ile Gly Met Asn Ser Pro Leu His Thr Pro Met Tyr Tyr Phe Leu Phe 55 60 Asn Leu Ser Phe Ile Asp Leu Cys Tyr Ser Thr Val Ile Thr Pro Lys 7.0 7.5 Leu Leu Val Asn Phe Val Ser Glu Arg Asn Thr Ile Ser Tyr Glu Gly 85 90 Cys Met Thr Gln Leu Tyr Phe Tyr Cys Phe Phe Val Ser Ala Glu Cys 105 Tyr Val Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys 120 Pro Leu Leu Tyr Thr Val Thr Met Ser Pro Gln Val Cys Ser Leu Leu 135 140 Thr Leu Ile Val Tyr Val Gly Ala Phe Ile Gly Ala Trp Ala His Thr 150 155 Gly Cys Met Met Arg Leu Thr Phe Cys Lys Asp Asn Thr Val Asn His 165 170 Tyr Met Cys Asp Ile Leu Pro Leu Leu Glu Leu Ser Cys Ser Ser Thr 180 185 Tyr Ile Asn Glu Leu Val Val Phe Ile Val Val Gly Phe Asp Val Gly 200 205 Val Pro Ser Ile Thr Ile Val Val Ser Tyr Thr Phe Ile Leu Ser Ser 215 220 Ile Leu His Ile Arg Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr 230 235 Cys Ser Ser His Ile Ile Val Val Ser Val Phe Phe Gly Ser Gly Ala 250 245 Phe Met Tyr Leu His Pro Ser Ser Val Leu Ser Met Asp Gln Gly Lys 265 Val Ser Thr Val Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu 280 285 Ile Tyr Ser Phe Arg Asn Lys Glu Val Lys Ile Ala Leu Arg Lys Thr

Leu Arg Met Lys Ile Ser Ser

...

<210> 1652

<211> 315 <212> PRT

<213> Mus musculus

<400> 1652

Met Met Gln Ala Asn Gln Thr Gln Val Thr Glu Phe Ile Leu Leu Gly 10 Leu Ser Asp Asp Pro His Thr Gln Lys Leu Leu Phe Ile Leu Phe Leu 25 Gly Ile Tyr Met Val Thr Val Leu Gly Asn Leu Leu Leu Met Phe Leu Val Arg Ala Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Cys 55 Asn Leu Ser Leu Ala Asp Leu Cys Phe Ser Thr Asn Ile Val Pro Gln Ala Leu Ile His Leu Leu Ser Arg Lys Lys Thr Ile Ser Phe Arg Arg 90 85 Cys Ala Ala Gln Leu Leu Phe Leu Ile Phe Gly Cys Thr Gln Cys 105 Ala Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu His Tyr Ser Ser Ile Met Thr Trp Arg Val Cys Ile Gln Leu 135 140 Ala Thr Val Ser Trp Thr Ser Gly Ile Leu Val Ser Val Val Asp Thr 150 155 Thr Phe Thr Leu Arg Leu Pro Tyr Arg Gly Ser Asn Ser Ile Ala His 165 170 Phe Phe Cys Glu Ala Pro Ala Leu Leu Ala Leu Ala Ser Thr Asp Thr 185 Gln Thr Ser Glu Met Ala Ile Phe Leu Met Gly Val Val Ile Leu Leu 200 Ile Pro Val Ser Leu Ile Leu Val Ser Tyr Gly His Ile Ile Val Thr 215 Val Val Lys Met Lys Ser Ala Ala Gly Arg Phe Lys Ala Phe Ser Thr 230 235 Cys Gly Ser His Leu Met Val Val Ile Leu Phe Tyr Gly Ser Ala Ile 250 245 Ile Thr Tyr Met Thr Pro Lys Ser Ser Lys Glu Gln Glu Lys Leu Val 265 260 Ser Val Phe Tyr Ala Met Val Thr Pro Met Leu Asn Pro Leu Ile Tyr 280 Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Trp Lys Val Ala Met 295 300 Lys Asn Phe Ser Ser Arg Leu Arg Ile Thr His 310

<210> 1653

<211> 309

<212> PRT

<213> Mus musculus

```
<400> 1653
Met Gly Ile Glu Asn Thr Thr Leu Leu Thr Glu Phe Val Leu Thr Gly
Leu Ser His Leu Pro Gln Trp Lys Ile Pro Leu Phe Leu Leu Phe Leu
Val Ile Tyr Leu Ile Thr Ile Val Gly Asn Leu Gly Leu Ile Thr Leu
                            40
Ile Trp Asn Asp Pro His Leu His Ile Pro Met Tyr Phe Phe Leu Gly
                        55
Ser Leu Ala Phe Val Asp Thr Trp Leu Ser Ser Thr Val Thr Pro Lys
                    70
                                        75
Met Leu Leu Asp Ile Phe Ser Lys Ser Lys Leu Ile Ser Phe Ser Glu
                                    90
Cys Met Ile Gln Phe Phe Ser Phe Gly Ile Ser Ala Thr Thr Glu Cys
           100
                                105
Phe Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                            120
Pro Leu Leu Tyr Pro Val Ile Met Thr Asn Arg Leu Cys Val Arg Leu
                        135
                                            140
Leu Thr Leu Ser Phe Val Gly Gly Phe Ile His Val Leu Ile His Glu
                    150
                                        155
Ser Phe Leu Phe Arg Leu Thr Phe Cys Asn Ser Asn Ile Ile His His
               165
                                    170
Phe Tyr Cys Asp Val Met Pro Leu Leu Lys Ile Ser Cys Asn Asp Pro
                                185
Ser Leu Asn Tyr Leu Met Leu Phe Ile Phe Ser Gly Ser Ile Gln Val
                            200
Phe Ser Ile Leu Thr Ile Leu Ile Ser Tyr Thr Leu Val Leu Phe Ser
                        215
                                            220
Ile Leu Lys Gln Lys Ser Leu Lys Ser Ile Lys Lys Ala Phe Ser Thr
                   230
                                        235
Cys Gly Ala His Leu Leu Ser Val Ser Leu Tyr Tyr Gly Ser Leu Leu
                245
                                    250
Phe Met Tyr Val Arg Pro Ala Ser Pro Gln Val Asp Asp Gln Asp Met
                                265
Met Asp Ser Ile Phe Tyr Thr Val Ile Ile Pro Val Leu Asn Pro Ile
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Gln Val Lys Asn Ser Leu Glu Lys Phe
Leu Lys Arg Asn Thr
305
```

<210> 1654 <211> 308 <212> PRT <213> Mus musculus

<400> 1654

 Met
 Gly
 Tyr
 Gly
 Asn
 Leu
 Thr
 Glu
 Phe
 Ile
 Leu
 Leu
 Gly
 Leu
 Phe
 His

 Asn
 Glu
 Asp
 Val
 Lys
 Ala
 Ile
 Cys
 Ala
 Val
 Leu
 Phe
 Leu
 Leu
 Cys
 Tyr

 Leu
 Ala
 Ile
 Leu
 Cys
 Gly
 Asn
 Leu
 Val
 Val
 Leu
 Thr
 Ile
 Lys
 Gly

 Ser
 Gln
 Leu
 Ser
 Gln
 Pro
 Met
 Tyr
 Phe
 Phe
 Leu
 Ser
 Tyr
 Leu
 Ser

```
55
Phe Met Asp Val Cys Phe Thr Ser Thr Val Ala Pro Lys Phe Ile Ile
                    70
                                        75
Gly Leu Leu Val Gln Cys Asn Thr Ile Ser Tyr Asn Gly Cys Ile Ala
                85
Gln Met Phe Tyr Ala His Phe Phe Gly Ala Thr Glu Ile Phe Ile Leu
            100
                                105
Val Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu Tyr
                           120
                                                125
Tyr Met Ile Thr Met Ser Arg Gln Val Cys Tyr Ile Leu Val Ile Gly
                        135
                                            140
Ser Val Phe Gly Ala Phe Ile His Ser Leu Val His Val Leu Val Ile
                    150
                                        155
Ile Arg Leu Pro Phe Cys Gly Ser Asn Glu Ile Asp His Tyr Phe Cys
               165
                                    170
Asp Ile Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr Arg Leu Leu
            180
                               185
Val Ile Val Ile Ile Thr Thr Gly Val Met Ser Ile Leu Thr Phe
                            200
Val Ala Leu Val Ile Ser Tyr Ile Ile Ile Leu Ser Ile Leu Arg Thr
Arg Ser Ser Glu Ser Arg Arg Lys Ala Leu Ser Thr Cys Gly Ser His
                    230
                                        235
Ile Thr Val Val Phe Met Phe Phe Leu Pro Leu Ile Phe Thr Tyr Val
                                    250
Pro Met Gly Asp Ser Val Gly Asp Asp Lys Val Phe Ala Leu Phe Tyr
            260
                                265
Thr Met Ile Ala Pro Leu Phe Asn Pro Leu Ile Tyr Thr Leu Arg Asn
                            280
                                                285
Thr Asp Met Lys Asn Ala Met Arg Lys Val Trp Cys Gln Asp Lys Leu
    290
                        295
                                            300
Phe Glu Gly Lys
305
<210> 1655
<211> 318
<212> PRT
<213> Mus musculus
<400> 1655
Met Lys Asn Gln Ser Leu Glu Val Val Phe Val Leu Leu Gly Leu Thr
                                    10
Gly Asp Pro Gln Leu Gln Ile Leu Ile Phe Leu Phe Leu Phe Asn
                                25
Tyr Ile Leu Ser Leu Met Gly Asn Leu Val Ile Ile Leu Leu Thr Leu
Leu Asp Pro His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
                        55
Ser Phe Leu Glu Ile Ala Phe Thr Thr Val Cys Ile Pro Arg Phe Leu
                    70
                                        75
Thr Ser Ile Leu Leu Gly Glu Lys Met Ile Leu Tyr Asn Ala Cys Val
                85
                                    90
```

Ala Gln Leu Phe Phe Phe Phe Leu Leu Gly Ala Thr Glu Phe Tyr Leu 100 105 110 Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu

120

115

```
His Tyr Pro Ile Ile Met Asn Ser Lys Val Cys His Leu Leu Val Leu
   130
                       135
Ser Ser Trp Val Thr Gly Phe Phe Val Ile Leu Pro Pro Leu Leu
                   150
                                       155
Gly Leu Lys Leu Asp Phe Cys Ala Ser Lys Thr Val Asp His Phe Leu
                                   170
Cys Asp Thr Ser Val Leu Gln Leu Ser Cys Thr Asp Thr Arg Leu Ile
           180
                               185
Glu Leu Met Ala Phe Ala Leu Ala Ile Met Thr Leu Ile Ile Thr Leu
                           200
                                                205
Ile Leu Val Leu Phe Ser Tyr Thr Leu Ile Ile Lys Thr Ile Leu Lys
                       215
                                            220
Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser
                                       235
                   230
His Met Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Met Tyr
               245
                                   250
Val Lys Thr Ser Ala Lys Glu Arg Val Thr Leu Asn Lys Gly Ile Ala
           260
                               265
Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr Thr
                           280
Leu Arg Asn Gln Gln Val Lys Glu Ala Phe Lys Asn Val Ile His Arg
                       295
                                            300
Phe Cys Ser Phe Lys Asn His Glu Thr Arg Phe Arg His Gln
```

<210> 1656

<211> 310 <212> PRT

<213> Mus musculus

<400> 1656

Met Arg Asn His Thr Thr Val Thr Val Phe Ile Leu Leu Gly Leu Thr 10 Asp Asp Leu Gln Leu Gln Val Val Phe Val Leu Leu Phe Leu Thr 25 Tyr Met Leu Ser Val Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu 40 Leu Asp Ser His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe 55 Ser Phe Leu Glu Ile Ser Phe Thr Thr Val Cys Ile Pro Lys Phe Leu 70 75 Val Ser Met Ala Thr Gly Asp Lys Thr Ile Ser Tyr Asn Glu Cys Ala 90 85 Ala Gln Leu Phe Phe Thr Ile Leu Leu Gly Ala Thr Glu Phe Phe Leu 105 Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 115 120 His Tyr Met Thr Ile Met Ser Ser Lys Ile Cys Asn Leu Leu Val Phe 135 140 Val Ser Trp Leu Ser Gly Phe Leu Ile Ile Phe Pro Pro Leu Leu Met 150 155 Gly Leu Gln Leu Asp Phe Cys Ala Ala Asn Thr Val Asp His Phe Phe 165 170 Cys Asp Val Ser Pro Ile Leu Gln Leu Ser Cys Thr Asp Thr His Ile 185 Ile Glu Leu Met Met Leu Leu Ser Ala Ile Leu Thr Leu Leu Val Thr

```
195
                            200
Leu Val Leu Val Ser Leu Ser Tyr Thr Asn Ile Ile Arg Thr Ile Leu
                       215
                                           220
Arg Ile Pro Ser Ser Gln Gln Arg Arg Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Val Val Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met
                                    250
Tyr Val Lys Pro Ser Ala Lys Glu Arg Val Ala Leu Asn Lys Gly Ile
                               265
Ala Leu Leu Ser Thr Ser Val Ala Pro Met Leu Asn Pro Phe Ile Tyr
                           280
Thr Leu Arg Asn Lys Gln Val Lys Asp Ala Phe Lys Asn Met Thr Lys
                       295
Arg Trp Ser Phe Tyr Gln
<210> 1657
<211> 310
<212> PRT
<213> Mus musculus
<400> 1657
Met Glu Ala Glu Asn His Thr Thr Val Ala Glu Leu Ile Ile Leu Gly
Leu Thr Glu Asp Pro Lys Leu Cys Ile Val Phe Phe Val Ile Phe Leu
                                25
Gly Val Tyr Ile Val Thr Leu Val Gly Asn Ile Ser Ile Ile Thr Leu
                           40
Ile Arg Ile Ser Ser Gln Leu His Thr Pro Met Tyr Leu Phe Leu Ser
                       55
His Leu Ala Phe Val Asp Ile Leu Tyr Ser Thr Ser Val Ser Val Ile
                                        75
Met His Met Glu Leu Leu Gly His Gly Leu Ala Leu Pro Val Ala Ala
                                    90
Cys Ala Ala Gln Leu Cys Ile Thr Val Ser Phe Gly Ser Ala Glu Cys
                                105
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser
                           120
Pro Leu Leu Tyr Ser Thr Leu Met Ser Pro Arg Val Cys Phe Leu Leu
                       135
                                           140
Leu Gly Met Ser Tyr Val Gly Gly Cys Met Asn Gly Trp Thr Phe Thr
                   150
                                       155
Gly Cys Leu Leu Ser Leu Ser Phe Cys Gly Pro Asn Gln Ile Asp His
                                   170
               165
Phe Phe Cys Asp Phe Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp Val
                               185
Ser Ile Ile Gly Ile Ile Pro Ser Ile Ser Ser Gly Ser Ile Ile Val
                            200
Val Thr Val Phe Val Ile Ala Val Ser Tyr Ile Tyr Ile Leu Ile Thr
                       215
                                            220
Ile Leu Asn Met Arg Ser Thr Glu Gly Arg His Lys Ala Phe Ser Thr
                                        235
Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly Thr Ile Thr
               245
                                    250
Phe Ile Tyr Val Met Pro Lys Ser Asn Tyr Ser Thr Glu Gln Asn Lys
```

265

260

Val Leu Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Arg Asp Val Lys Glu Ala Leu Arg Lys Ala 295 Thr Val Arg Val Tyr Ser 305 <210> 1658 <211> 310 <212> PRT <213> Mus musculus <400> 1658 Met Glu Ala Glu Asn His Thr Thr Val Ala Glu Leu Ile Ile Leu Gly 10 Leu Thr Glu Asp Pro Lys Leu Cys Ile Val Phe Phe Val Ile Phe Leu 25 Gly Val Tyr Ile Ile Thr Leu Val Gly Asn Ile Ser Ile Ile Thr Leu 40 Ile Arg Ile Ser Ser Gln Leu His Thr Pro Met Tyr Leu Phe Leu Ser 55 His Leu Ala Phe Val Asp Ile Val Phe Ser Thr Ser Val Ser Val Ile 70 75 Met Leu Met Glu Leu Leu Gly His Gly Leu Val Leu Ser Val Ala Thr 90 8.5 Cys Ala Ala Gln Leu Cys Met Thr Val Ser Phe Gly Ser Ala Glu Cys 105 Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser 115 120 125 Pro Leu Leu Tyr Ser Thr Leu Met Ser Ser Arg Val Cys Phe Leu Leu 135 Leu Gly Ile Ser Tyr Val Gly Gly Phe Val Asn Gly Trp Thr Phe Thr 150 155 Gly Cys Val Leu Ser Leu Ser Phe Cys Gly Pro Thr Gln Ile Asn His 165 170 Phe Phe Cys Asp Phe Ser Pro Leu Leu Lys Val Ser Cys Ser Asp Val 180 185 Ser Ile Ile Gly Ile Ile Pro Ser Ile Ser Ser Gly Ser Ile Ile Val 200 Val Thr Val Phe Val Ile Ala Val Ser Tyr Ile Tyr Ile Leu Ile Thr 215 220 Ile Leu Lys Met Arg Ser Thr Glu Gly Arg His Lys Ala Phe Ser Thr 230 235 Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Thr Ile Thr

250

Ile Tyr Ser Leu Arg Asn Arg Asp Val Lys Asp Ala Leu Arg Lys A 290 295 300

Ile Val Arg Val Tyr Ser
305 310

245

```
<212> PRT
<213> Mus musculus
<400> 1659
Met Glu Pro Gly Asn Tyr Thr Val Val Thr Glu Val Ile Leu Leu Gly
Phe Thr Glu Asp Ala Ile Ile Arg Ala Ile Leu Phe Ile Val Phe Leu
                               25
Ile Ile Tyr Ser Val Thr Leu Met Gly Asn Ala Ser Ile Ile Met Leu
                           40
Ile Arg Arg Ser Pro Gln Leu His Thr Pro Met Tyr Leu Leu Leu Ser
                       55
His Leu Ala Phe Val Asp Ile Gly Tyr Ser Ser Ser Val Thr Pro Ile
                   70
                                        75
Met Leu Lys Gly Phe Leu Arg Lys Glu Thr Phe Ile Leu Val Ser Gly
                                    90
Cys Val Ala Gln Leu Cys Ser Val Val Thr Phe Gly Ser Thr Glu Cys
                                105
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser
                            120
Pro Leu Leu Tyr Ala Thr Gln Met Ser Ser Thr Val Cys Ile Leu Leu
                       135
                                           140
Val Gly Ala Ser Tyr Leu Gly Gly Cys Val Asn Ala Trp Thr Phe Thr
                   150
                                        155
Gly Cys Leu Leu Asn Leu Ser Phe Cys Arg Pro Asn Lys Val Asn His
               165
                                   170
Phe Phe Cys Asp Tyr Ser Pro Leu Leu Lys Ile Ser Cys Ser His Asp
           180
                               185
Phe Ser Ser Glu Val Ile Pro Ala Ile Ser Ser Gly Ser Ile Ile Val
                           200
Val Thr Val Phe Ile Ile Ala Leu Ser Tyr Val Tyr Ile Leu Val Ser
                        215
                                            220
Ile Leu Lys Met Arg Ser Thr Glu Gly Arg Gln Lys Ala Phe Ser Thr
                    230
Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Thr Ile Thr
                245
                                    250
Phe Ile Tyr Val Met Pro Lys Ser Ser Tyr Ser Thr Asp Gln Asn Lys
                               265
Val Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Ile
                           280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Met Lys Lys Leu
                        295
Met Ala Asn Thr His His
305
<210> 1660
<211> 306
<212> PRT
<213> Mus musculus
<400> 1660
Met Met Asn Lys Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Val Thr
                                    10
Arg Asp Pro Glu Leu Arg Lys Ile Leu Ser Val Leu Phe Leu Ile Met
            20
```

<211> 310

```
Tyr Met Ala Thr Val Phe Gly Asn Leu Leu Ile Val Val Thr Ile Thr
                            4 0
Arg Ser Pro Ser Leu Arg Ser Pro Met Tyr Phe Phe Leu Leu Ser Leu
Ser Leu Met Asp Val Thr Tyr Ser Ser Val Ile Ala Pro Lys Leu Ile
                                        75
Met Asp Ser Leu Ser Glu Arg Thr Ile Val Ser Phe Glu Arg Cys Met
                85
                                    90
Thr Gln Leu Phe Ala Glu His Phe Phe Gly Gly Val Gly Ile Ile Leu
                               105
Leu Ile Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                           120
His Tyr Val Lys Met Met Thr Pro Arg Val Cys Cys Leu Met Val Gly
                       135
                                           140
Gly Ala Trp Val Gly Gly Ser Met His Ala Thr Ile Gln Leu Leu Phe
                   150
                                       155
Met Tyr Gln Ile Pro Phe Cys Ser Ser Asn Ile Ile Asp His Phe Met
               165
                                    170
Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Met Asp Thr His Ile
                                185
Leu Gly Leu Leu Val Ile Leu Asn Ser Gly Val Met Cys Val Ser Ile
       195
                            200
                                                205
Phe Leu Ile Leu Ile Ala Ser Tyr Met Val Ile Leu Cys Ser Leu Lys
                       215
Ser Tyr Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                   230
                                        235
His Phe Ala Val Val Leu Phe Phe Val Pro Cys Ile Phe Leu Tyr
               245
                                   250
Met Arg Pro Val Val Thr Phe Pro Ile Asp Lys Ala Met Ala Val Ser
           260
                               265
Phe Thr Ile Val Glu Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                           280
Asn Thr Glu Val Lys Tyr Ala Ile Lys Asn Met Cys Arg Lys Gln Gly
   290
                        295
Ser His
305
```

<210> 1661 <211> 315 <212> PRT <213> Mus musculus

<400> 1661

 Met Gln His Gln Val Asn Gln Ser Thr Gly Val Val Phe Val Phe Val 1
 5
 5
 6
 7
 7
 6
 7
 7
 10
 7
 7
 7
 8
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 15
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16

```
100
                               105
Asn Phe Met Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys
                           120
                                               125
Asn Pro Leu Leu Tyr Thr Val Ala Met Ser Gln Lys Leu Cys Ala Leu
                       135
Leu Val Thr Gly Thr Tyr Leu Trp Gly Gly Leu Cys Ala Thr Thr Leu
                   150
Thr Tyr Phe Leu Leu Ala Leu Ser Tyr Cys Arg Ser Ser Ile Ile Asn
               165
                                   170
His Phe Cys Cys Glu Tyr Ser Ala Ile Ile Ser Ala Ala Cys Ser Asp
                               185
Ser Ser Ile Ser Gln Ile Ala Cys Leu Leu Ile Cys Met Phe Asn Glu
                           200
Ile Cys Ser Leu Leu Ile Ile Ile Val Ser Tyr Val Val Ile Phe Thr
                       215
                                           220
Thr Val Ile Lys Ile Pro Thr Lys Gly Ala Leu Gln Lys Ala Leu Ser
                   230
                                       235
Thr Cys Ala Pro His Leu Thr Ala Ile Ser Phe Cys His Gly Ile Ile
                                   250
               245
Leu Leu Leu Tyr Cys Val Leu Lys Ser Lys Ser Ser Leu Leu Val
                               265
Lys Ile Val Thr Val Phe Tyr Ser Met Val Ile Pro Met Leu Asn Pro
                           280
Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Thr Val Arg Lys
                      295
Leu Ile His Met Lys Ile Leu Ser Gln Ser Leu
                   310
```

<210> 1662 <211> 312

<212> PRT

<213> Mus musculus

<400> 1662

Met Gly Ile Trp Asn His Thr Ser Val Lys Glu Phe Ile Leu Ile Gly 10 Leu Thr Glu Asn Pro Asn Trp Gln Val Pro Leu Phe Phe Leu Phe Cys 25 Ile Val Tyr Phe Ile Ile Leu Val Gly Asn Trp Gly Met Ile Ile Leu 40 Ile Trp Leu Asn Ala Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 Asn Leu Ser Phe Cys Asp Ile Cys Tyr Ser Thr Ile Ile Ala Pro Lys 70 7.5 Met Leu Ile Asn Phe Leu Ser Glu His Lys Ser Thr Arg Leu Phe Ala 90 Cys Ile Leu Gln Ser Phe Phe Phe Ala Val Tyr Val Thr Thr Glu Val 100 105 Ile Phe Leu Ser Met Met Ala Tyr Asp Arg Tyr Val Ala Ile Ala Asn 115 120 Pro Leu Met Tyr Thr Val Ile Met Thr Asn Asn Ile Cys Thr Gln Met 135 Val Leu Ala Ser Tyr Leu Gly Gly Leu Ile Asn Ser Met Ile His Thr 150 155 Ile Gly Leu Leu Lys Leu Asp Phe Cys Gly Pro Asn Ile Val Asn His 170

```
Phe Phe Cys Asp Val Pro Pro Leu Leu Lys Leu Ala Cys Ser Asp Ala
           180
                               185
His Ile Asn Glu Met Leu Leu Val Phe Ser Gly Val Phe Ala Ile
                           200
Ser Thr Phe Ile Ile Val Met Val Ser Tyr Ile His Ile Ile Ile Ala
                       215
Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ala Ser His Leu Thr Ala Val Ala Leu Phe Tyr Gly Ser Leu Thr
                                   250
Phe Asn Tyr Ile Gln Pro Ser Ser Gln Tyr Ser Met Glu Gln Glu Lys
                               265
Leu Ser Ala Val Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
       275
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Ala Lys Lys Leu
                      295
                                           300
Ile Cys Gly Glu Arg Asn Ala Pro
                   310
```

<210> 1663 <211> 312 <212> PRT

<213> Mus musculus

<400> 1663

Met Ala Ile Trp Asn His Thr Gly Val Ser Glu Phe Ile Leu Val Gly 10 Leu Thr Glu Asn Pro Asn Trp Gln Val Pro Leu Phe Leu Leu Phe Ser 25 Val Val Tyr Phe Ile Ile Leu Val Gly Asn Trp Gly Met Ile Ile Leu Ile Trp Leu Asn Ala Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser 60 Asn Leu Ser Phe Cys Asp Ile Cys Tyr Ser Thr Ile Ile Ala Pro Lys Met Leu Leu Asn Phe Leu Ser Glu His Lys Ser Ser Thr Phe Phe Ala 8.5 90 Cys Ile Leu Gln Ser Phe Phe Phe Ala Val Tyr Val Thr Thr Glu Val 105 Ile Leu Leu Ser Met Met Ala Tyr Asp Arg Tyr Val Ala Ile Ala Asn 120 Pro Leu Met Tyr Thr Val Ile Met Thr His Asn Ile Cys Thr Gln Met 135 140 Val Leu Ala Ser Tyr Leu Gly Gly Leu Ile Asn Ser Met Ile His Thr 150 155 Ile Gly Leu Leu Lys Leu Asp Phe Cys Gly Pro Asn Ile Val Asn His 165 170 Phe Phe Cys Asp Val Pro Pro Leu Leu Lys Leu Ala Cys Ser Asp Ala 185 190 His Ile Asn Glu Met Leu Leu Val Phe Ser Gly Met Ile Ala Ile 195 200 205 Phe Thr Phe Ile Ile Ile Met Val Ser Tyr Ile His Ile Ile Ile Ala 215 220 Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr 230 235 Cys Ala Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Ser Leu Thr

```
245
                                    250
Phe Asn Tyr Ile Gln Pro Ser Ser Gln Tyr Ser Met Glu Gln Glu Lys
           260
                               265
Leu Ser Ala Met Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Ala Lys Arg Leu
                       295
Ile Cys Arg Glu Ser Ser Thr Ser
                    310
<210> 1664
<211> 312
<212> PRT
<213> Mus musculus
<400> 1664
Met Asn Thr Leu Asn Tyr Thr Phe Lys Pro Asp Phe Ile Leu Met Gly
Leu Thr Asp Ser Lys Glu Val Gln Leu Val Leu Ser Val Leu Phe Leu
Leu Ile Tyr Leu Val Thr Val Leu Gly Asn Ile Gly Met Ile Leu Ile
                            40
Ile Arg Leu Asp Val Gln Leu His Thr Pro Met Tyr Phe Phe Leu Thr
                        55
His Leu Ser Phe Leu Asp Leu Ser Tyr Ser Thr Val Ile Thr Pro Lys
                   70
                                        75
Thr Leu Glu Asn Leu Leu Thr Ser Thr Lys Asn Ile Ser Phe Met Gly
               85
                                   90
Cys Phe Thr Gln Met Tyr Phe Phe Val Leu Leu Ala Ala Thr Glu Cys
           100
                               105
Phe Leu Leu Ser Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                           120
Pro Leu His Tyr Ser Val Ile Met Ser Lys Arg Phe Cys Ser Ala Leu
                        135
Leu Thr Gly Ser Tyr Val Phe Gly Ala Val Asp Ser Thr Val Asn Met
                    150
                                       155
Leu Cys Met Gly Thr Leu Asp Phe Cys Asn Ser Asn Val Ile His Asp
               165
                                   170
Phe Phe Cys Asp Thr Ser Pro Leu Ile Ala Leu Ser Cys Ser Asn Thr
           180
                               185
                                                   190
His Asp Ile Glu Phe Ile Ile Phe Ile Phe Ala Gly Ser Thr Leu Leu
                           200
                                                205
Leu Ser Leu Ile Thr Ile Ser Ala Ser Tyr Leu Ser Ile Leu Ser Thr
                       215
                                           220
Ile Leu Lys Ile Ser Ser Thr Ser Gly Lys Gln Lys Ala Phe Ser Thr
                                        235
Cys Ala Ser His Ile Leu Ala Val Thr Ile Phe Tyr Gly Thr Met Ile
                245
                                    250
Phe Thr His Leu Lys Ser Asn Lys Ser Phe Ser Leu Gly Lys Asp Gln
                               265
                                                   270
Val Ala Ser Val Phe Tyr Thr Ile Val Ile Pro Met Leu Asn Pro Leu
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Cys Ala Ile Asp Arg Ile
                       295
                                            300
Ile Lys Lys Arg Glu Lys Gly Leu
```

310

```
<211> 310
<212> PRT
<213> Mus musculus
<400> 1665
Met Thr Glu Asn Asn Phe Thr Lys Val Thr Val Phe Met Phe Ser Gly
                                   10
Phe Ser Asp His Pro Glu Leu Gln Val Ser Leu Phe Leu Ile Phe Leu
                                25
Phe Ile Tyr Leu Phe Thr Val Trp Gly Asn Ile Gly Leu Ile Leu Leu
                            40
Ile Arg Ile Asp Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
Asn Leu Ala Phe Ile Asp Ile Phe Tyr Ser Ser Thr Val Thr Pro Lys
                                        75
Ala Leu Val Asp Phe Gln Ser Thr Gln Lys Ser Ile Ser Phe Val Gly
                                    90
Cys Phe Val Gln Met Tyr Phe Phe Val Gly Leu Val Cys Ser Glu Cys
                                105
                                                    110
Phe Leu Leu Gly Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Ser Val Ile Met Ser Gln Lys Val Cys Asn Trp Leu
                        135
                                            140
Ala Val Ile Pro Tyr Met Ile Gly Phe Thr Asn Ser Leu Ile Ser Ile
                                        155
                   150
Cys Val Ile Ser Ser Leu Pro Leu Cys Asp Pro Tyr Ile Asn His Phe
                                    170
                165
Phe Cys Asp Thr Thr Ala Leu Leu Ala Leu Ser Cys Val Asp Ala Phe
                                185
Ser Thr Glu Leu Val Ile Phe Val Leu Ala Gly Phe Thr Leu Leu Ser
                            200
        195
                                                205
Ser Leu Leu Ile Ile Thr Phe Thr Tyr Val Thr Ile Ile Ser Ala Ile
                        215
Leu Arg Ile Gln Ser Ala Ala Gly Arg Trp Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ala Ser His Leu Thr Gly Val Thr Val Phe Tyr Gly Ser Leu Ile Phe
                245
                                    250
Thr Tyr Leu Gln Pro Asp Asn Thr Ser Ser Leu Thr Gln Ala Gln Val
            260
                                265
Ala Ser Val Phe Tyr Thr Ile Val Ile Pro Met Leu Asn Pro Leu Ile
                            280
                                                285
Tyr Ser Leu Arg Asn Lys Asp Val Lys Asn Ala Leu Leu Arg Val Ile
                        295
                                            300
His Arg Lys His Leu Leu
305
```

<210> 1666 <211> 312

<210> 1665

<212> PRT

<213> Mus musculus

<400> 1666

Met Asp Pro Gly Asn His Thr Val Val Lys Glu Phe Ile Leu Leu Gly

1:

```
10
Leu Thr Glu Asn Pro Asp Trp Gln Ile Pro Leu Phe Leu Leu Phe Ser
Ile Ile Tyr Leu Ile Ile Phe Val Gly Asn Trp Leu Met Ile Phe Leu
                            40
Ile Trp Leu Asn Ala His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
                                           60
Asn Leu Ser Phe Cys Asp Ile Cys Tyr Ser Thr Val Ile Ala Pro Lys
                   70
                                       75
Met Leu Ile Asn Ile Val Ser Glu His Lys Ser Ser Arg Leu Leu Ser
               85
                                   90
Cys Val Leu Gln Ser Phe Phe Phe Met Val Tyr Ala Thr Thr Glu Val
           100
                               105
Ile Leu Leu Ser Met Met Ala Tyr Asp Arg Tyr Val Ala Ile Ala Asn
                           120
                                               125
Pro Leu Met Tyr Thr Val Ile Met Thr Phe Ser Ile Cys Ile Ser Met
                       135
Val Leu Ala Cys Tyr Leu Cys Gly Ile Ile Asn Ser Leu Thr His Thr
                   150
                                       155
Ile Ser Leu Leu Arg Leu Asp Phe Cys Gly Pro Asn Ile Val Asn His
               165
                                   170
Phe Phe Cys Asp Val Pro Pro Leu Leu Lys Leu Ser Cys Ser Asp Ala
                               185
           180
His Ile Asn Glu Met Leu Leu Val Phe Ser Gly Val Ile Ala Ile
                            200
Phe Thr Phe Ile Ile Val Met Val Ser Tyr Ile His Ile Ile Ile Ala
                       215
                                           220
Ile Leu Lys Ile Arg Ser Thr Glu Gly Arg Arg Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ala Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Ser Gly Thr
               245
                                   250
Phe Ser Tyr Ile Gln Pro Ser Ser Gln Tyr Ser Met Glu Gln Glu Lys
                               265
Val Ser Ala Val Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Ala Lys Lys Leu
                       295
Ile Cys Gly Trp Ser Asn Thr Ser
                   310
<210> 1667
<211> 305
<212> PRT
<213> Mus musculus
```

```
Glu Asn Lys Thr Ile Ser Phe Ala Gly Cys Met Ser Gln Val Phe Phe
                                    90
                8.5
Ala His Cys Ile Ala Ala Gly Glu Met Val Leu Leu Val Ile Met Ala
                                105
Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Phe Thr Ile
                            120
Met Asn Met Lys Arg Cys Thr Gly Leu Val Phe Thr Ser Trp Thr Thr
                        135
                                            140
Gly Phe Val His Ala Leu Ser His Leu Val Val Ile Val Glu Leu Pro
                   150
                                        155
Phe Cys Gly Pro Lys Glu Ile Asp Ser Phe Phe Cys Asp Met Pro Leu
                                    170
                165
Val Ile Lys Leu Ala Cys Ile Asp Ser Arg Asp Leu Asp Val Leu Met
           180
                                185
                                                   190
Asn Ala Asp Cys Gly Leu Val Ala Val Thr Cys Phe Ile Leu Leu Leu
       195
                            200
                                                205
Ile Ser Tyr Thr Tyr Ile Leu Ile Thr Val Cys Gln Ser Ser Lys Ala
                        215
                                            220
Gly Ala Ser Lys Ala Met Asn Thr Cys Thr Ala His Ile Thr Val Val
                    230
Leu Ile Phe Phe Val Pro Cys Ile Phe Ile Tyr Val Trp Pro Leu Ser
                                    250
                245
Ile Ile Trp Leu Asp Lys Phe Leu Ala Val Phe Tyr Ser Val Phe Thr
                               265
Pro Leu Leu Asn Pro Ala Ile Tyr Thr Leu Arg Asn Lys Glu Met Lys
                           280
                                                285
Asn Ala Met Lys Lys Phe Ile Asn Ser Tyr Leu Ser His Lys Gly Asn
                        295
Leu
305
```

<210> 1668

<211> 309

<212> PRT

<213> Mus musculus

<400> 1668

Met Lys Asn Lys Thr Ser Leu Thr Glu Phe Ile Leu Leu Gly Leu Thr 10 Asp Val Pro Glu Leu Gln Val Ala Val Phe Thr Phe Leu Phe Leu Ala 20 25 Tyr Val Phe Ser Met Ile Gly Asn Leu Thr Ile Leu Ile Leu Thr Leu 40 45 Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe 55 Ser Phe Leu Glu Ile Ser Phe Thr Asn Ile Phe Ile Pro Arg Val Leu 75 Val Ser Ile Thr Thr Gly Asn Lys Ser Ile Ser Phe Ala Gly Cys Phe Ala Gln Tyr Phe Phe Ala Ile Phe Leu Gly Ala Thr Glu Phe Tyr Leu 100 105 Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Met Ala Ile Met Ser Asn Arg Val Cys Thr His Leu Val Leu 135 140 Cys Ser Trp Leu Gly Gly Leu Met Ala Ile Ile Pro Pro Ile Thr Leu

```
145
                   150
                                      155
Met Ser Gln Gln Asn Phe Cys Ala Ser Asn Arg Leu Asn His Tyr Phe
               165
                                  170
Cys Asp Phe Glu Pro Leu Leu Glu Leu Ser Cys Ser Asp Thr Ser Leu
                               185
Ile Glu Lys Val Val Phe Leu Val Ala Ser Val Thr Leu Val Val Thr
       195.
                           200
Leu Met Leu Val Thr Leu Ser Tyr Thr Phe Ile Ile Lys Thr Ile Leu
                      215
                                          220
Lys Leu Pro Ser Ala Gln Gln Arg Thr Lys Ala Phe Ser Thr Cys Ser
                   230
                                      235
Ser His Met Ile Val Ile Ser Leu Ser Tyr Gly Ser Cys Phe Phe Met
              245
                       250
Tyr Val Lys Pro Ser Ala Lys Val Gly Gly Thr Phe Asp Lys Gly Val
           260
                              265
Ala Leu Leu Ile Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
                           280
Thr Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Lys Asp Thr Val Lys
                       295
Lys Leu Val Asn Leu
305
```

<210> 1669 <211> 310 <212> PRT <213> Mus musculus

<400> 1669

Met Lys Arg Ala Asn Cys Thr Glu Val Arg Glu Phe Val Phe Gln Gly 1.0 Phe Ser Asn Phe Gln Glu His Gln Leu Thr Leu Phe Ile Ile Phe Phe 25 Ala Leu Tyr Ile Leu Thr Leu Thr Gly Asn Val Ile Ile Val Thr Ile 40 Ile Arg Ile Asp His His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 Val Leu Ser Thr Ser Glu Thr Phe Tyr Ser Leu Val Ile Ile Pro Arg 70 75 Met Leu Gly Ser Leu Val Gly Leu Ser Gln Thr Ile Ser Leu Glu Cys 90 8.5 Cys Gly Thr Gln Leu Phe Phe Leu Gly Phe Gly Ile Thr Asn Cys 105 Phe Leu Leu Ala Val Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Arg Tyr Ser Val Ile Met Asn Trp Arg Val Cys Val Ile Leu 135 Ala Ser Ser Val Cys Ala Thr Gly Phe Leu Leu Ser Leu Val Gln Ala 150 155 Leu Ala Ile Phe Arg Leu Pro Phe Cys Asn Thr Leu Ile Lys His Phe 165 170 Phe Cys Asp Val Arg Pro Ile Leu Asp Leu Ala Cys Thr Val Pro Val 185 Ile Asn Gln Val Leu Thr Leu Val Leu Thr Leu Met Val Leu Thr Ala 200 205 Pro Ala Ile Phe Leu Phe Val Ser Tyr Ala Leu Ile Ile Ser Thr Ile 215

```
Leu Lys Ile Ala Ser Ser Asp Gly Trp Lys Lys Thr Phe Ala Thr Cys
                    230
                                        235
Ser Ser His Leu Thr Val Val Val Ile His Tyr Gly Cys Ala Ser Ile
                245
                                    250
Val Tyr Phe Lys Pro Lys Ser Glu Asn Ser Lys Asp Gln Asp Gln Leu
                                265
Leu Ser Val Thr Tyr Thr Val Ile Thr Pro Leu Leu Asn Pro Val Val
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Gln Asp Ala Leu Arg Lys Val Leu
                       295
Cys Arg Lys Ser Leu Ser
305
<210> 1670
<211> 310
<212> PRT
<213> Mus musculus
<400> 1670
Met Lys Lys Thr Asn Cys Thr His Val Arg Glu Phe Val Phe Gln Gly
                                    10
Phe Ser Asn Phe Gln Glu His Gln Phe Thr Leu Phe Val Val Phe Phe
                                25
                           40
Ile Arg Ile Asp His His Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
Val Leu Ser Thr Ser Glu Thr Phe Tyr Ser Leu Val Ile Ile Pro Arg
                                        75
                    70
                                    90
            100
                                105
```

Val Leu Tyr Ile Leu Thr Leu Ala Gly Asn Val Ile Ile Val Thr Ile Met Leu Gly Ser Leu Val Gly Leu Ser Gln Thr Ile Ser Leu Glu Cys Cys Gly Thr Gln Leu Phe Phe Leu Gly Phe Ala Ile Thr Asn Cys Leu Leu Ala Val Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Arg Tyr Ser Val Ile Met Asn Trp Arg Val Cys Val Ile Leu 135 Ala Ser Ser Val Gly Ala Thr Gly Phe Leu Leu Ser Leu Ile Gln Ala 150 155 Val Ala Ile Phe Arg Leu Pro Phe Cys Asn Thr Leu Ile Glu His Phe 165 170 Phe Cys Asp Val Arg Pro Ile Leu Asp Leu Ala Cys Thr Val Pro Val 180 185 190 Ile Asn Asp Ile Leu Thr Leu Ala Leu Ser Leu Met Val Ile Thr Ala 200 Pro Ala Thr Phe Leu Phe Val Ser Tyr Val Leu Ile Ile Ser Thr Ile 215 220 Leu Lys Ile Ala Ser Ala Glu Gly Arg Arg Lys Thr Phe Ala Thr Cys 230 235 Ala Ser His Leu Thr Val Val Ile His Tyr Gly Cys Ala Ser Ile 245 250 Ala Tyr Phe Lys Pro Lys Ser Glu Asn Thr Lys Asp Gln Asp Gln Leu 260 265 Ile Ser Val Thr Tyr Thr Val Ile Thr Pro Leu Leu Asn Pro Val Val 280 Tyr Ser Leu Arg Asn Lys Glu Val Gln Asp Ala Leu Arg Lys Val Leu 290 295 300 Gly Lys Lys Ser Leu Ser 305 310 <210> 1671 <211> 305

<400> 1671

<213> Mus musculus

<212> PRT

Met Asp Gln Asn Asn Asn Thr Val Ser Glu Phe Ile Met Leu Gly Phe 10 Thr Thr Asp Pro Val Ile Gln Lys Val Leu Phe Ala Val Phe Leu Val 25 Val Tyr Thr Leu Thr Leu Met Gly Asn Ser Ser Leu Ile Met Leu Ile 40 Cys Asn Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Ile Gly Asn 55 Leu Ser Phe Leu Asp Leu Gly Leu Ser Ser Val Tyr Thr Pro Lys Ile Leu Glu Thr Cys Ile Ser Glu Asp Lys Ser Ile Ser Phe Ala Gly Cys 85 90 Val Ala Gln Phe Phe Phe Ser Ala Ala Leu Asp Tyr Thr Glu Cys Tyr 105 Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser Lys Pro 120 Leu Leu Tyr Ser Gln Ala Met Ser Leu Lys Leu Cys Val Cys Phe Val 135 140 Ala Ala Ser Tyr Val Gly Gly Phe Ile Asn Ser Val Ile Ile Thr Lys 150 155 Asp Thr Phe Ala Leu Thr Phe Cys Asn Asp Asn Val Ile Asp Asp Phe 165 170 Phe Cys Asp Ile Pro Pro Leu Val Lys Leu Ala Cys Gly Lys Lys 185 Ser Phe Gln Ser Val Leu Phe Phe Leu Leu Thr Ser Asn Val Ile Ile 200 Pro Ile Val Phe Ile Leu Ala Thr Tyr Leu Phe Ile Ile Ala Thr Ile 215 Leu Arg Ile Arg Ser Thr Gln Gly Arg Leu Lys Ala Phe Ser Thr Cys 230 235 Ser Ser His Leu Ile Ser Val Thr Leu Tyr Tyr Gly Ser Ile Leu Tyr 245 250 Ile Tyr Ala Arg Pro Arg Ser Ser Tyr Ser Leu Asp Arg Asp Lys Ile 260 265 Val Ser Thr Phe Tyr Thr Val Val Phe Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Asn Lys Leu Leu 295 Lys

305

<210> 1672

<211> 317

<212> PRT

<213> Mus musculus

```
<400> 1672
Met Arg Asn Leu Ser Gly Ser His Val Glu Glu Phe Val Leu Val Gly
Phe Pro Thr Ser Arg Pro Phe Gln Ala Leu Leu Phe Val Phe Phe
Ala Ile Tyr Leu Leu Thr Leu Leu Glu Asn Val Leu Ile Val Ser Thr
                            40
Ile Trp Leu Thr Pro Ser Leu His Arg Pro Met Tyr Phe Phe Leu Gly
His Leu Ser Phe Leu Glu Leu Trp Tyr Ile Asn Val Thr Ile Pro Arg
                                        75
Leu Leu Gly Ala Phe Leu Thr Gln Asp Gly Arg Val Ser Tyr Gly Gly
                85
                                    90
Cys Met Thr Gln Leu Tyr Phe Phe Ile Ala Leu Ala Cys Thr Glu Cys
           100
                                105
Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Glu
                            120
                                                125
Pro Leu Arg Tyr Pro Ser Leu Met Pro Pro Arg Leu Ala Thr Arg Leu
Ala Ala Ser Trp Gly Ser Gly Phe Phe Ser Ser Met Met Lys Leu
                    150
                                        155
Leu Phe Ile Ser Arg Leu Ser Tyr Cys Gly Pro Asn Ile Ile Asn His
                                   170
Phe Phe Cys Asp Ile Ser Pro Leu Leu Asn Leu Thr Cys Ser Asp Lys
           180
                               185
Glu Gln Ala Glu Leu Val Asp Phe Leu Leu Ala Leu Val Met Ile Leu
                           200
Leu Pro Leu Val Ala Val Val Ser Ser Tyr Ala Ala Ile Ile Val Ala
                       215
                                           220
Ile Leu Arg Ile Pro Thr Ala Gln Gly Arg His Lys Ala Phe Ser Thr
                    230
                                        235
Cys Thr Ser His Leu Ala Val Val Ile Tyr Tyr Ser Ser Thr Leu
                245
                                    250
Phe Thr Tyr Ala Arg Pro Arg Ala Met Tyr Thr Phe Asn Tyr Asn Lys
                                265
Ile Ile Ser Val Leu Tyr Thr Val Ile Val Pro Phe Leu Asn Pro Ala
                            280
                                                285
Ile Tyr Cys Leu Arg Asn Lys Glu Val Lys Asp Ala Phe Arg Lys Thr
                       295
Met Leu Gly Arg Cys His His Pro Arg Glu Gly Pro Asp
                    310
<210> 1673
<211> 312
<212> PRT
<213> Mus musculus
<400> 1673
Met Ser Pro Gly Asn Ser Ser Trp Ile His Pro Ser Ser Phe Leu Leu
                                    10
Leu Gly Ile Pro Gly Leu Glu Glu Leu Gln Phe Trp Leu Gly Leu Pro
```

20 25 30

Phe Gly Thr Val Tyr Leu Ile Ala Val Leu Gly Asn Val Ile Ile Leu 35 40 45

Phe Val Ile Tyr Leu Glu His Ser Leu His Gln Pro Met Phe Tyr Leu

```
50
                        55
Leu Ala Ile Leu Ala Val Thr Asp Leu Gly Leu Ser Thr Ala Thr Val
                   70
                                        7.5
Pro Arg Ala Leu Gly Ile Phe Trp Phe Gly Phe His Lys Ile Ala Phe
                                    90
Arg Asp Cys Val Ala Gln Met Phe Phe Ile His Leu Phe Thr Gly Ile
            100
                                105
Glu Thr Phe Met Leu Val Ala Met Ala Phe Asp Arg Tyr Ile Ala Ile
                            120
                                                125
Cys Asn Pro Leu Arg Tyr Asn Thr Ile Leu Thr Asn Arg Thr Ile Cys
                       135
                                            140
Ile Ile Val Gly Val Gly Leu Phe Lys Asn Phe Ile Leu Val Phe Pro
                   150
                                        155
Leu Ile Phe Leu Ile Leu Arg Leu Ser Phe Cys Gly His Asn Ile Ile
                                    170
               165
Pro His Thr Tyr Cys Glu His Met Gly Ile Ala Arg Leu Ala Cys Val
           180
                                185
Ser Ile Lys Val Asn Val Leu Phe Gly Leu Ile Leu Ile Ser Met Ile
                            200
Leu Leu Asp Val Val Leu Ile Ala Leu Ser Tyr Ala Lys Ile Leu His
                        215
Ala Val Phe Lys Leu Pro Ser Trp Glu Ala Arg Leu Lys Ala Leu Asn
                    230
                                        235
Thr Cys Gly Ser His Val Cys Val Ile Leu Ala Phe Phe Thr Pro Ala
                                    250
Phe Phe Ser Phe Leu Thr His Arg Phe Gly His Asn Ile Pro Arg Tyr
            260
                                265
Ile His Ile Leu Leu Ala Asn Leu Tyr Val Ile Ile Pro Pro Ala Leu
                            280
Asn Pro Leu Ile Tyr Gly Val Arg Thr Lys Gln Ile Arg Asp Arg Val
                       295
Val Ile Phe Phe Cys Lys Glu Val
```

<210> 1674

<211> 320

<212> PRT

<213> Mus musculus

<400> 1674

 Met
 Ala
 Lys
 Glu
 Val
 Glu
 Val
 Arg
 Met
 Lys
 Ala
 Trp
 Asn
 Glu
 Thr
 Thr

 Val
 Leu
 Glu
 Phe
 Val
 Leu
 Gly
 Phe
 Leu
 Val
 Ala
 Gln
 His
 Leu
 Gly
 25
 25
 20
 30
 Cys
 Gly
 Ala
 Ser
 Val
 His
 Leu
 Leu
 Val
 Ala
 Gln
 His
 Leu
 Gly
 Ala
 Fro
 Leu
 Ala
 Ser
 Val
 Thr
 Thr
 Ala
 Ser
 Pro
 Ala
 Ser
 Pro
 Ala
 Ser
 Pro
 Ala
 Ser
 Pro
 Ala
 Fro
 Ser
 Pro
 Ala
 Fro
 Ser
 Pro
 Ala
 Fro
 Ala
 Fro
 Ala
 Fro
 Ala
 Fro
 Ala
 Fro
 Ala
 Fro
 Fro</

Asp Arg Tyr Leu Ala Ile Cys Lys Pro Leu Arg Tyr Pro Ala Ile Met 135 140 Asn Pro Arg Val Cys Phe Leu Leu Val Phe Phe Ser Tyr Val Leu Ser 150 155 Phe Ile Leu Val Thr Gly Val Ile Leu Arg Leu Ser Arg Leu Ser Phe 170 Cys Gly Ser Asn Val Ile Pro His Phe Phe Cys Asp Leu Gly Ser Leu 185 Ile His Leu Ser Cys Ser Asp Thr Lys Ser Leu Glu Ser Met Ala Phe 200 Gly Val Ala Val Val Leu Phe Thr Ser Val Leu Ala Ala Ile Phe 215 Ala Tyr Ser Asn Ile Leu Ile Ser Ile Met Arg Leu Pro Leu Ala Lys 230 235 Asp Arg Gln Lys Ala Phe Ser Thr Cys Ser Ser His Leu Ile Val Leu 245 250 Ser Leu Met Tyr Gly Ser Cys Val Phe Ile Tyr Val Lys Pro Lys Gln 260 265 Val Ser Arg Leu Glu Ser Asn Arg Glu Ala Ala Leu Val Asn Thr Val 280 Val Thr Pro Leu Leu Asn Pro Val Ile Tyr Thr Leu Arg Asn Lys Gln 295 300 Val His Gln Ala Leu Arg Asp Ala Leu Ser Arg Val Asn Leu Gln Lys 310

<210> 1675

<211> 313

<212> PRT

<213> Mus musculus

<400> 1675

Met Leu His Ser Asn Lys Thr Gln Phe His Pro Ser Ser Phe Leu Leu Ile Gly Ile Pro Gly Leu Glu Glu Leu His Leu Trp Ile Gly Phe Pro 25 Phe Phe Ala Val Tyr Leu Ile Ala Val Leu Gly Asn Ile Ile Ile Leu 40 Phe Val Ile Gln Thr Glu Arg Ser Leu His Gln Pro Met Phe Tyr Phe 55 Leu Ala Met Leu Ala Cys Thr Asp Leu Gly Leu Ser Thr Ala Thr Ile 75 Pro Lys Met Leu Gly Ile Phe Trp Phe Asn Leu Arg Glu Ile Ala Phe 85 90 Gly Ala Cys Ile Thr Gln Met Tyr Ile Ile His Thr Cys Thr Gly Leu 105 Glu Ser Val Val Leu Thr Ile Met Ala Ile Asp Arg Tyr Ile Ala Ile 120 125 Cys Tyr Pro Leu Arg Tyr Ser Met Ile Leu Thr Asn Lys Val Ile Ala 135 140 Ile Leu Gly Ile Ile Ile Val Arg Thr Leu Ile Phe Val Thr Pro 150 155 Phe Ile Phe Leu Ile Leu Arg Leu Pro Phe Cys Gly Val Arg Ile Ile 165 170 Pro His Thr Tyr Cys Glu His Met Gly Leu Ala Lys Leu Ala Cys Ala 180 185 Asn Ile Lys Val Asn Val Ile Tyr Gly Leu Val Ala Phe Ser Val Gly

195 200 205 Tyr Ile Asp Leu Ser Val Ile Gly Phe Ser Tyr Ile Arg Ile Leu Gln 215 220 Ala Val Phe Arg Leu Pro Ser Trp Asp Ala Arg Leu Lys Ala Leu Ser 235 230 Thr Cys Gly Ser His Val Ser Val Met Leu Ala Phe Tyr Leu Pro Ala 245 250 Leu Phe Ser Phe Met Thr His Arg Phe Gly His Asn Ile Pro His Tyr 260 265 Ile His Ile Leu Leu Ala Asn Leu Tyr Val Val Val Pro Pro Ala Leu 280 Asn Pro Val Ile Tyr Gly Val Arg Thr Lys Gln Ile Arg Glu Arg Val 295 Leu Arg Met Leu Asn Pro Lys Met His 310

<210> 1676

<211> 319

<212> PRT

<213> Mus musculus

<400> 1676

Met Leu Gln Met Gln Asp Asn Thr Glu Phe Leu Ser Asn Phe Thr Ser 10 Lys Leu Pro Thr Phe Leu Leu Thr Gly Ile Pro Gly Leu Glu Ser Ala 25 His Gly Trp Ile Ser Ile Pro Phe Cys Cys Leu Tyr Ala Thr Ala Leu 40 4.5 Ser Gly Asn Ser Met Ile Leu Phe Ile Ile Val Thr Gln His Ser Leu 55 His Glu Pro Met Tyr Tyr Phe Leu Ser Val Leu Ser Ala Thr Asp Leu 70 75 Gly Leu Thr Phe Ser Thr Met Ser Thr Thr Leu Arg Ile Leu Trp Phe 90 Gln Ala Asn Glu Ile Ser Leu Asp Phe Cys Ile Val Gln Met Phe Phe 105 Leu His Gly Phe Thr Cys Thr Glu Ser Gly Val Leu Val Ala Met Ala 120 Phe Asp Arg Tyr Val Ala Ile Tyr Lys Pro Leu Arg Tyr Thr Met Ile 135 140 Leu Met Asn Ser Arg Ile Ile Gln Ile Gly Phe Leu Val Ile Met His 150 155 Thr Leu Leu Leu Thr Val Pro Leu Leu Leu Leu Lys Pro Val Ser 170 165 Phe Cys Lys Arg Asn Thr Leu Ser His Ser Tyr Cys Tyr His Pro Asp 185 Val Ile Lys Leu Ala Cys Ser Asp Thr Arg Ala Asn Ser Ile Cys Gly 200 Leu Val Asp Leu Ile Leu Thr Thr Gly Val Asp Ile Pro Cys Ile Val 215 220 Leu Ser Tyr Ile Leu Ile Ile Arg Ser Val Leu Asn Ile Ala Phe Ser 230 235 Glu Glu Arg His Lys Ala Phe Ser Thr Cys Val Ser His Ile Ala Ala 245 250 Val Ala Val Phe Tyr Ile Pro Thr Phe Ser Leu Ser Leu Val His Arg 265

<210> 1677 <211> 316 <212> PRT <213> Mus musculus

<400> 1677

Met Val Asn Asp Thr Thr His His Tyr Ile Ser Phe Phe Tyr Leu Val - 5 10 Gly Ile Pro Gly Phe Glu Asn Phe Tyr Tyr Leu Ile Ser Ile Pro Val 25 Cys Leu Leu Phe Val Leu Thr Leu Leu Gly Asn Ser Val Val Ile Ala 40 Thr Ile Lys Leu Glu Pro Ser Leu His Gln Pro Met Tyr Phe Phe Leu 55 Cys Met Leu Ala Met Asn Asp Ile Leu Leu Thr Cys Ser Thr Ser Leu 70 75 Lys Met Leu Gly Ile Phe Trp Phe Asn Glu His Trp Ile Glu Phe Asp 85 90 Val Cys Leu Thr Gln Met Tyr Phe Ile His Thr Leu Cys Ile Phe Glu 100 105 Ser Ala Ile Leu Val Ala Met Ala Phe Asp Arg Phe Val Ala Ile Cys 115 120 125 Ile Pro Leu His Tyr Ala Thr Ile Leu Thr Thr Ala Met Val Ile Lys 135 Leu Gly Val Val Gly Leu Ser Arg Ala Leu Leu Met Val Leu Pro Cys 150 155 160 Pro Leu Leu Ile Lys Arg Leu Pro Tyr Tyr Thr Gly Tyr Ile Ile Pro 170 His Thr Tyr Cys Glu His Met Ala Val Val Lys Leu Ala Ser Ala Asn 180 185 Thr Phe Ile Asn Arg Ala Tyr Gly Ile Ser Ala Ala Leu Ser Val Ile 200 Thr Leu Asp Val Trp Leu Ile Ala Ala Ser Tyr Ile Lys Ile Leu Gln 215 220 Ala Val Phe Arg Leu Ser Ser Gln Asn Ala Arg Ser Lys Ala Leu Gly 230 235 Thr Cys Ala Ala His Val Cys Thr Ile Leu Ala Phe Tyr Thr Pro Ala 245 250 Leu Phe Ser Phe Leu Thr His Arg Ile Gly Lys Asn Val Pro Pro Ser 265 270 Val His Ile Ile Leu Ala Ser Met Tyr Leu Leu Val Pro Pro Thr Val 280 Asn Pro Leu Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Asp Arg Val 295 Leu Ser Leu Phe Ser His Leu Lys Ile Ala Glu Tyr

```
<212> PRT
<213> Mus musculus
<400> 1678
Met Gln His Thr Asn His Ser His Gln Asn Pro Ser Ser Phe Leu Leu
                                    10
Met Gly Ile Pro Gly Leu Glu Ala Ser His Phe Trp Ile Ala Phe Pro
                                25
Phe Cys Ser Met Tyr Ala Leu Ala Val Leu Gly Asn Met Ala Val Leu
                           40
Leu Val Val Arg Ser Glu Pro Ser Leu His Gln Pro Met Tyr Leu Phe
                       55
Leu Cys Met Leu Ser Thr Ile Asp Leu Ile Leu Cys Thr Ser Thr Val
                   70
                                        75
Pro Lys Leu Leu Ala Leu Phe Trp Ala Asn Ala Ala Glu Ile Ala Phe
                                    90
Gly Ala Cys Ala Thr Gln Met Phe Phe Ile His Gly Phe Ser Ala Val
            100
                                105
Glu Ser Gly Ile Leu Leu Ser Met Ala Phe Asp Arg Tyr Leu Ala Ile
                            120
                                                125
Cys Arg Pro Leu His Tyr Gly Ser Leu Leu Ser Ser Glu Ser Val Ser
                       135
Lys Leu Gly Ala Ala Ala Leu Leu Arg Gly Leu Gly Leu Met Thr Pro
                   150
                                        155
Leu Thr Cys Leu Leu Ala Arg Leu Ser Tyr Cys Gly Arg Val Val Ala
               165
                                    170
His Ser Tyr Cys Glu His Met Ala Val Lys Leu Ala Cys Gly Gly
                               185
           180
Thr Gln Pro Asn Asn Ile Tyr Gly Ile Thr Ala Ala Thr Leu Val Val
                           200
Gly Thr Asp Ser Ile Cys Ile Ala Ile Ser Tyr Ala Leu Ile Leu Arg
                        215
                                            220
Ala Val Leu Gly Leu Ser Ser Lys Glu Ala Arg Ala Lys Thr Phe Gly
                    230
                                        235
Thr Cys Gly Ser His Leu Gly Val Ile Leu Leu Phe Tyr Thr Pro Gly
                245
                                    250
Leu Phe Ser Phe Tyr Thr Gln Arg Phe Gly Gln His Val Pro Arg His
                                265
Val His Ile Leu Leu Ala Asp Leu Tyr Leu Val Val Pro Pro Met Leu
                            280
Asn Pro Ile Ile Tyr Gly Met Lys Thr Lys Gln Ile Arg Asp Gly Ala
                       295
Leu Arg Leu Leu Lys Arg Gly Pro Ala Gln Ser
                    310
<210> 1679
<211> 324
<212> PRT
<213> Mus musculus
<400> 1679
Met Leu Gly Pro Ser Tyr Asn His Thr Met Glu Ser Pro Gly Thr Phe
                                    10
Phe Leu Leu Gly Ile Pro Gly Phe Gln Ser Ser Tyr Leu Trp Leu Ala
                                25
```

<211> 315

```
Ile Ser Leu Ser Thr Met Tyr Ser Ile Ala Leu Leu Gly Asn Met Leu
                            40
Ile Ile Ile Val Ile Cys Met Asp Ser Thr Leu Gln Glu Pro Met Tyr
Phe Phe Leu Cys Val Leu Ala Ala Val Asp Ile Val Met Ala Ser Ser
Val Val Pro Lys Met Val Ser Ile Phe Ser Ser Gly Asp Ser Ser Ile
                                    90
Ser Phe Asn Ala Cys Phe Thr Gln Met Tyr Phe Val His Ala Ala Thr
                               105
Ala Val Glu Thr Gly Leu Leu Ala Met Ala Phe Asp Arg Tyr Val
                           120
Ala Ile Cys Lys Pro Leu His Tyr Met Arg Ile Leu Thr Arg His Val
                       135
                                            140
Met Leu Gly Ile Ser Val Thr Ile Thr Val Arg Ala Val Ile Phe Met
                   150
                                       155
Thr Pro Leu Ser Trp Met Leu Ser His Leu Pro Phe Cys Ala Ser Asn
                165
                                    170
Val Val Pro His Ser Tyr Cys Glu His Met Ala Val Ala Lys Leu Ala
                                185
Cys Ala Asp Pro Met Pro Ser Ser Leu Tyr Ser Leu Ile Phe Ser Ser
        195
                            200
Ile Ile Val Gly Ser Asp Val Ala Phe Ile Ser Ala Ser Tyr Ser Leu
                       215
                                            220
Ile Leu Lys Ala Val Phe Gly Leu Ser Ser Arg Asn Ala Gln Trp Lys
                   230
                                        235
Ala Leu Ser Thr Cys Gly Ser His Val Gly Val Met Ala Leu Tyr Tyr
                                    250
Leu Pro Gly Met Ala Ser Ile Tyr Val Ala Trp Leu Gly Gln Asp Arg
           260
                               265
Val Pro Leu His Thr Gln Val Leu Leu Ala Asp Leu Tyr Leu Ile Ile
                           280
Pro Pro Thr Leu Asn Pro Ile Ile Tyr Gly Ile Arg Thr Arg Gln Ile
                       295
Arg Glu Arg Ile Trp Ser Leu Leu Thr His Cys Phe Phe Ser Gln Cys
                                        315
Thr Gln Gly Ser
```

```
<210> 1680
```

<400> 1680

 Met
 Gln
 Leu
 Asn
 Ile
 Asn
 Val
 Thr
 Glu
 Phe
 Ile
 Leu
 Leu
 Gly
 Leu
 Thr

 Gln
 Asp
 Pro
 Ser
 Arg
 Lys
 Asn
 Ile
 Val
 Phe
 Ala
 Ile
 Phe
 Leu
 Phe
 Leu
 Phe
 Leu
 Phe
 Phe
 Ala
 Ile
 Phe
 Phe
 Leu
 Phe
 Phe
 Phe
 Leu
 Phe
 Phe
 Phe
 Leu
 Phe
 Phe
 Phe
 Leu
 Phe
 Phe
 Phe
 Leu
 Phe
 Phe

<211> 308

<212> PRT

<213> Mus musculus

```
85
                                   90
Ile Gln Val Phe Thr Phe His Leu Phe Gly Ser Leu Glu Ile Phe Ile
                               105
Leu Ile Leu Met Ala Val Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                           120
His Tyr Met Thr Ile Met Asn Arg Gln Val Cys Gly Met Leu Val Ala
                       135
                                            140
Thr Val Cys Val Gly Ser Cys Ile His Ser Ser Val Gln Ile Ile Leu
                   150
                                       155
Ala Leu Ser Leu Pro Phe Cys Gly Pro Asn Glu Ile Asp His Tyr Phe
                                   170
               165
Cys Asp Leu Gln Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr Tyr Val
                              185
Ile Asn Leu Leu Val Ser Asn Ser Gly Thr Leu Cys Thr Val Ser
                           200
                                               205
Phe Leu Met Leu Met Val Ser Tyr Ile Ile Ile Leu Tyr Ser Leu Arg
                       215
Asn His Ser Ala Glu Gly Arg Arg Lys Ala Leu Phe Thr Cys Val Ser
                    230
                                        235
His Ile Ile Val Val Ile Leu Phe Phe Val Pro Cys Ile Phe Ile Tyr
                245
                                    250
Thr Arg Pro Ala Thr Thr Phe Pro Met Asp Lys Met Ile Ser Val Phe
                               265
           2.60
Tyr Thr Ile Cys Thr Pro Phe Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                           280
Asn Ala Glu Val Lys Asn Ala Met Arg Lys Leu Trp Ser Lys Lys Ile
                       295
                                            300
Ser Asp Asp Ile
305
```

<210> 1681

<211> 312

<212> PRT

<213> Mus musculus

<400> 1681

Met Ala Asp Val Asn Phe Thr Phe Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Asp Arg Asp Glu Leu Lys Val Phe Leu Phe Ile Leu Phe Leu 25 Leu Ile Tyr Val Ile Ser Leu Val Gly Asn Leu Gly Met Phe Met Leu 40 Ile His Ile Thr Pro Lys Leu His Thr Pro Met Tyr His Phe Leu Arg 55 60 Ser Leu Ser Phe Val Asp Ala Cys Tyr Ser Ser Val Phe Ala Pro Thr 75 Leu Leu Leu Asn Phe Phe Val Glu Lys Glu Thr Ile Ser Phe Ser Ala 90 Cys Ile Leu Gln Tyr Phe Leu Phe Ala Ser Leu Leu Thr Thr Glu Gly 105 Phe Leu Leu Ala Ala Met Ala Phe Asp Arg Tyr Val Ala Ile Val Asn 120 Pro Leu Thr Tyr Thr Val Val Met Thr Lys Leu Ile Cys Val Leu Leu 135 140 Val Leu Gly Ser Cys Leu Gly Gly Thr Ile Thr Ser Leu Thr His Thr 150 155

```
Ile Gly Leu Ile Lys Leu Ser Phe Cys Gly Pro Asn Val Ile Ser His
                                   170
               165
Phe Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr
                               185
Ser Met Asn Glu Leu Leu Leu Val Phe Ser Gly Val Ile Ala Ile
                           200
Thr Thr Leu Leu Thr Val Val Leu Ser Tyr Ile Phe Ile Val Ala Ala
                       215
Ile Leu Arg Ile Arg Ser Ala Ala Gly Arg His Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ala Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly Ser Ile Ser
                245
                                   250
Phe Ser Tyr Ile Gln Pro Ser Ser Gln Tyr Ser Leu Glu Gln Glu Lys
           260
                               265
Val Val Ser Val Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
       275
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Val Lys Arg Val
                       295
Met Glu Ile Lys His Ser Leu His
305
                    310
```

<211> 316

<212> PRT

<213> Mus musculus

<400> 1682

10 Val Gly Ile Pro Gly Leu Glu His Phe His Val Trp Ile Gly Ile Pro Phe Cys Val Ile Tyr Ile Ile Ala Val Val Gly Asn Cys Ile Leu Leu 40 Tyr Leu Ile Thr Val Glu Arg Ser Leu His Glu Pro Met Phe Phe 55 Leu Ser Met Leu Ala Met Thr Asp Leu Ile Leu Ser Thr Asp Gly Val 70 75 Pro Lys Thr Leu Ser Ile Phe Trp Met Gly Ala Arg Glu Ile Thr Phe 90 Pro Gly Cys Leu Thr Gln Met Phe Phe Leu His Tyr Ser Phe Val Leu 100 105 Asp Ser Ala Ile Leu Met Ala Met Ala Phe Asp Arg Tyr Val Ala Ile 115 120 125 Cys Ser Pro Leu Arg Tyr Ala Thr Ile Leu Thr Pro Lys Thr Ile Val 135 Lys Ile Ala Val Gly Ile Ser Phe Arg Ser Phe Cys Ile Ile Leu Pro 150 155 Val Val Phe Leu Leu Thr Arg Leu Pro Phe Cys Arg Thr Arg Ile Ile 165 170 Pro His Thr Tyr Cys Glu His Ile Gly Val Ala Arg Leu Ala Cys Ala 180 185 Asp Ile Ser Ile Asn Ile Trp Tyr Gly Phe Cys Val Pro Ile Met Thr 200 205 Val Ile Ser Asp Val Val Leu Ile Ala Val Ser Tyr Thr Leu Ile Leu 215 Cys Ala Val Phe Arg Leu Pro Ser Arg Asp Ala Arg Gln Lys Ala Leu

Met Ile Thr Ser Asn Val Ser Ser Tyr Asn Pro Gly Pro Phe Leu Leu

```
225
                   230
                                       235
Gly Thr Cys Gly Ser His Val Cys Val Ile Leu Met Phe Tyr Thr Pro
               245
                                   250
Ala Phe Phe Ser Ile Leu Ala His Arg Phe Gly His Asn Val Ser Leu
            260
                                265
Thr Phe His Ile Met Phe Ala Asn Leu Tyr Ile Val Ile Pro Pro Ala
                            280
Met Asn Pro Ile Val Tyr Gly Val Lys Thr Lys Gln Ile Arg Glu Lys
                       295
Val Ile Leu Leu Phe Ser Val Lys Ser Ile Asp Gly
                    310
<210> 1683
<211> 320
<212> PRT
<213> Mus musculus
<400> 1683
Met Gly Thr Lys His Ala Thr Asn Ser Ser Glu Phe Gln Val Ser Glu
                                    10
Phe Ile Leu Leu Gly Phe Pro Gly Ile His Glu Phe Gln Ile Trp Leu
                               25
Ser Leu Pro Met Ala Leu Leu Tyr Ile Ile Ala Leu Gly Ala Asn Phe
                           4.0
Leu Ile Leu Ile Thr Ile Tyr Leu Glu Pro Asn Leu His Gln Ser Met
                       55
Tyr Gln Phe Leu Gly Ile Leu Ala Val Val Asp Ile Gly Leu Ala Thr
                   70
                                        75
Thr Ser Met Pro Lys Ile Leu Ala Ile Leu Trp Phe Asp Ala Lys Thr
              85
                                    90
Ile Ser Leu Pro Glu Cys Phe Ala Gln Ile Tyr Ala Ile His Thr Phe
                                105
           100
Met Ser Met Glu Ser Gly Val Phe Leu Cys Met Ala Ile Asp Arg Tyr
                            120
Val Ala Ile Cys Tyr Pro Leu Gln Tyr Pro Ser Ile Val Thr Glu Ala
                       135
                                            140
Phe Val Ile Lys Ala Thr Leu Ser Met Met Leu Arg Ser Gly Leu Leu
                   150
                                        155
Thr Ile Pro Val Pro Val Leu Ala Ala Gln Arg Gln Tyr Cys Ser Arg
                                    170
               165
Asn Glu Ile Asp His Cys Leu Cys Ser Asn Leu Gly Val Ile Ser Leu
                               185
                                                    190
Ala Cys Asp Asp Ile Thr Val Asn Arg Asn Cys Gln Leu Thr Leu Ala
                           200
                                               205
Trp Leu Ile Leu Gly Ile Asp Met Ile Leu Val Cys Val Ser Tyr Ala
                        215
                                            220
Leu Ile Ile Arg Ser Val Leu Arg Leu Asn Ser Thr Glu Ala Val Ser
                    230
                                        235
Lys Ala Leu Ser Thr Cys Ser Ser His Leu Ile Leu Ile Met Phe Tyr
               245
                                    250
Tyr Thr Ala Ile Val Ile Leu Ser Val Thr His Leu Ala Gly Arg Arg
                               265
Val Pro Leu Ile Pro Val Leu Leu Asn Val Met His Ile Val Ile Pro
```

280

295

Pro Ser Leu Asn Pro Met Val Tyr Ala Leu Arg Thr Gln Glu Leu Lys

285

300

<210> 1685 <211> 319

<212> PRT

<213> Mus musculus

```
<400> 1685
Met Phe Gln Ile Leu Arg Asp Ser Asn Ser Ser Arg Phe Gln Val Ser
                                   10
Glu Phe Ile Leu Met Gly Phe Pro Gly Ile His Ser Trp Gln His Trp
                               25
Leu Ser Leu Pro Leu Ala Leu Leu Tyr Val Leu Ala Leu Ile Ala Asn
Ile Leu Ile Val Thr Val Ile Tyr Gln Glu Ala Ser Leu His Gln Pro
                       55
Met Tyr His Phe Leu Gly Ile Leu Ala Ile Val Asp Val Gly Leu Ala
Thr Thr Ile Met Pro Lys Ile Leu Ala Ile Leu Trp Phe Asn Asp Asn
               85
                                   90
Asn Ile Ser Leu Pro Glu Cys Phe Ala Gln Met Tyr Ala Ile His Cys
           100
                               105
                                                   110
Phe Val Ala Met Glu Ser Gly Ile Phe Val Cys Met Ala Ile Asp Arg
                           120
                                              125
Tyr Val Ala Ile Cys Lys Pro Leu Arg Tyr Ser Ser Ile Val Thr Glu
                       135
                                           140
Ser Phe Val Val Lys Ala Thr Val Ile Met Ala Ile Arg Asn Phe Val
                   150
                                       155
Ala Pro Met Ser Val Pro Val Leu Ala Ala Gln Arg Asn Tyr Cys Phe
               165
                                   170
                                                       175
Gln Asn Lys Ile Glu His Cys Leu Cys Ser Asn Leu Gly Val Thr Ser
                              185
Leu Ala Cys Asp Asp Arg Lys Ile Asn Ser Ile Asn Gln Leu Phe Leu
                           200
                                               205
Ala Trp Thr Leu Met Gly Ser Asp Leu Ala Leu Ile Met Ile Ser Tyr
                       215
Ala Leu Ile Leu Arg Ser Val Leu Arg Leu Asn Ser Ala Glu Ala Ala
                   230
                                      235
Ser Lys Ala Leu Ser Thr Cys Thr Ser His Leu Ile Leu Ile Phe Phe
                                   250
Phe Tyr Thr Val Ile Val Val Ile Ser Ile Thr His Ser Val Gly Ile
                               265
Lys Ile Pro Leu Ile Pro Val Leu Leu Asn Val Leu His Asn Val Ile
                           280
Pro Pro Ala Leu Asn Pro Met Val Tyr Ala Leu Lys Asn Lys Glu Leu
                      295
                                          300
Lys Gln Gly Leu Tyr Lys Val Leu Arg Leu Asp Val Lys Glu Gly
                   310
<210> 1686
```

<211> 306 <212> PRT

<213> Mus musculus

```
Ser Leu Ser Phe Ile Asp Phe Cys Gln Ser Thr Val Ile Thr Pro Lys
                                        75
Met Leu Val Lys Phe Val Arg Glu Lys Asn Glu Ile Ser Tyr Pro Glu
Cys Ile Thr Gln Leu Cys Phe Phe Val Ile Phe Ala Val Ser Glu Ser
            100
                                105
Tyr Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser
                           120
Pro Leu Leu Tyr Ser Ser Ile Met Ser Gln His Lys Cys Leu Ser Leu
                       135
Val Leu Gly Val Tyr Ile Leu Gly Ile Val Cys Ala Ser Ala His Val
                   150
                                       155
Gly Cys Ile Phe Arg Ile Asp Phe Cys Lys Ser Asp Leu Ile Asn His
               165
                                   170
Tyr Phe Cys Asp Leu Ile Ser Ile Leu Asn Leu Ser Cys Ser Asn Ile
           180
                               185
Phe Val Asn Asp Leu Val Ile Leu Ile Phe Ser Leu Ile Asn Thr Ile
                                                205
                            200
Phe Pro Thr Leu Thr Ile Leu Ser Ser Tyr Ala Phe Ile Ile Ser
                        215
Ile Leu Arg Ile Lys Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Ile Ser Ala Val Ala Ile Phe Tyr Ile Ser Ala Gly
               245
                                   250
Phe Thr Tyr Leu Asn Pro Ser Ser Ser His Ser Met Asp Glu Gly Lys
            260
                               265
Val Ser Ser Ile Phe Tyr Thr Ile Ile Val Pro Met Leu Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ile Ala Leu Lys Lys Met
    290
                       295
Ile Glu
305
```

<211> 308

<212> PRT

<213> Mus musculus

<400> 1687

Met Glu Gln Gly Asn His Ser Thr Val Lys Lys Phe Phe Leu Ser Gly 10 Leu Thr Glu Gln Pro Glu Leu Gln Leu Pro Leu Phe Leu Phe Leu 2.0 25 Gly Ile Tyr Leu Leu Thr Val Leu Gly Asn Leu Gly Met Ile Ile Leu 40 Ile Leu Leu Ser Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 60 Ser Leu Ser Phe Ile Asp Leu Cys Gln Ser Thr Val Ile Thr Pro Lys Met Leu Val Asn Phe Val Arg Glu Lys Asn Glu Ile Ser Tyr Pro Glu 85 90 Cys Ile Thr Gln Leu Tyr Phe Phe Leu Leu Phe Ala Ile Ser Glu Cys 105 Tyr Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser 120 Pro Leu Leu Tyr Ser Ser Ile Met Ser Gln His Lys Cys Leu Ser Ile

```
135
   130
Val Leu Gly Val Tyr Ile Ile Gly Ile Val Cys Ala Ser Ala His Val
                   150
                                      155
Gly Cys Met Phe Arg Ile Asp Phe Cys Arg Tyr Asp Val Ile Asn His
               165
                                   170
Tyr Phe Cys Asp Leu Ile Ser Ile Leu Lys Leu Ser Cys Ser Asp Ala
                               185
Phe Val Asn Glu Leu Met Ile Leu Ile Phe Ser Gly Val Asn Ile Ile
                           200
Ala Pro Thr Leu Thr Ile Leu Ser Ser Tyr Val Phe Ile Ile Met Ser
                       215
                                           220
Ile Leu Arg Ile Lys Ser Thr Glu Gly Arg Ser Lys Thr Phe Ser Thr
           230
                                       235
Cys Ser Ser His Ile Ser Ala Val Ala Val Phe Tyr Gly Ser Ala Ala
                                  250
               245
Phe Met Tyr Leu Asn Pro Ser Ser Ser Asn Ser Met Asp Glu Gly Lys
                              265
Val Ser Ser Ile Phe Tyr Thr Ile Ile Val Pro Met Leu Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Asn Ile Ala Leu Lys Lys Met
                       295
Ile Gln Arg Arg
305
```

<210> 1688 <211> 311 <212> PRT

<213> Mus musculus

<400> 1688

Met Ala Glu Gly Asn Phe Ser Val Val Thr Glu Phe Ile Leu Thr Gly 10 Leu Thr Glu Lys Pro Ala Leu Gln Leu Pro Leu Phe Leu Phe Leu 25 Gly Ile Tyr Val Val Thr Val Ile Gly Asn Leu Gly Met Val Met Leu 40 Ile Leu Phe Ser Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 Asn Leu Ser Phe Val Asp Leu Cys Gln Ser Ser Val Ile Met Pro Lys 70 75 Met Leu Glu Lys Phe Val Met Val Lys Ser Val Ile Ser Tyr Ala Glu 90 Cys Met Ala Gln Phe Tyr Leu Phe Asp Val Phe Ala Val Ser Glu Cys 105 His Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Lys Val Cys Ser Trp Met 135 Val Val Gly Val Tyr Ser Val Gly Leu Ile Cys Ala Thr Gly Glu Thr 150 155 Val Cys Leu Leu Arg Leu Leu Phe Cys Lys Ala Gly Asp Ile Asn His 165 170 Tyr Phe Cys Asp Leu Leu Pro Leu Leu Glu Gln Ser Cys Ser Asn Thr 180 185 Phe Ile Asn Glu Ile Leu Gly Leu Ser Phe Ser Ser Phe Asn Ile Thr 200

```
Val Pro Ala Leu Thr Ile Leu Ser Ser Tyr Ile Phe Ile Ile Ala Ser
                       215
                                           220
Ile Leu Arg Ile Pro Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ser Ser His Ile Leu Ala Val Ala Val Phe Phe Gly Ser Leu Ala
Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp Gln Gly Lys
                               265
           260
Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Phe Tyr Lys Val
               295
Val Gly Arg Arg Glu Phe Met
                    310
```

<210> 1689 <211> 308 <212> PRT <213> Mus musculus

<400> 1689

Met Glu Lys Ser Asn Asp Ser Ser Glu Tyr Gly Phe Ile Leu Glu Gly 10 Phe Ser Asp Arg Pro Arg Leu Glu Met Val Leu Phe Ile Val Asn Phe 25 Thr Leu Tyr Ser Val Ala Val Leu Gly Asn Ile Thr Ile Ile Leu Val 40 Cys Ile Leu Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ala 60 55 Asn Leu Ser Phe Leu Asp Leu Cys Phe Ser Thr Ser Cys Ile Pro Gln 75 Met Leu Val Asn Leu Trp Gly Pro Asp Lys Thr Ile Ser Tyr Ala Gly 90 Cys Val Val Gln Leu Phe Ser Phe Leu Ser Ile Gly Ser Val Glu Cys 100 105 Ile Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys 120 Pro Leu His Tyr Met Val Ile Met His Pro Gln Leu Cys Val Arg Leu 135 140 Met Ala Val Ala Trp Gly Val Gly Leu Ala Asn Ala Ile Ile Met Ser 150 155 Pro Leu Ala Met Thr Leu Ser Arg Cys Gly Arg Arg Arg Ile Asn His 170 165 Phe Leu Cys Glu Met Pro Ala Leu Ile Lys Met Ala Cys Val Asp Ala 185 Arg Pro Val Glu Met Leu Ser Phe Thr Leu Ala Ile Leu Ile Val Leu 200 Leu Pro Leu Thr Leu Ile Leu Val Ser Tyr Gly Tyr Ile Ala Ala Ala 215 220 Val Leu Arg Ile Lys Ser Ala Ala Gly Arg Trp Lys Ala Phe Asn Thr 230 235 Cys Ser Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Ser Ile Ile 245 250 Tyr Met Tyr Met Gln Pro Gly Asn Ser Ser Ser Gln Asp Gln Gly Lys 265 Phe Leu Thr Leu Phe Tyr Asn Leu Val Thr Pro Met Leu Asn Pro Leu

275 280 Ile Tyr Thr Leu Arg Asn Lys Glu Met Lys Gly Ala Leu Lys Lys Val 295 300 Cys Gly Arg His 305 <210> 1690 <211> 316 <212> PRT <213> Mus musculus <400> 1690 Met Gly Ile Leu Lys Asp Gly Asn His Thr Ala Val Thr Glu Phe Ile 10 Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Lys Val Val Leu Phe Thr 25 Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe Phe Leu Ser His Leu Ala Ser Val Asp Ile Gly Ile Ser Ser Val 70 75 Thr Pro Asn Met Leu Val Asn Phe Leu Leu Glu Arg Ser Thr Ile Ser Tyr Leu Gly Cys Gly Ile Gln Leu Gly Ser Gly Ala Phe Phe Gly Ser 100 105 Thr Glu Ser Phe Leu Leu Ala Ala Met Ala Tyr Asp His Phe Met Ala 120 125 Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Gln Val Cys 135 140 Ile Gln Leu Leu Val Gly Ser Tyr Ile Gly Gly Phe Leu Asn Ala Ser 150 155 Ser Phe Ile Leu Ser Phe Phe Ser Phe Leu Phe Cys Gly Pro Asn Lys 165 170 Val Asn His Phe Phe Cys Asp Phe Thr Pro Leu Val Glu Leu Ser Cys 185 180 Ser Asp Asn Ser Val Leu Leu Ile Leu Asp Ser Phe Ser Ala Gly Ser 200 Ile Ile Val Ile Thr Val Leu Val Ile Ala Ile Ser Tyr Thr Tyr Ile 215 220 Leu Ile Thr Ile Leu Lys Met His Ser Thr Glu Gly Arg His Lys Ala 230 235 Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Val Phe Tyr Gly 245 250 Thr Val Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Tyr Ser Thr Asp 265 Gln Asn Lys Val Leu Ser Val Phe Tyr Met Ile Ala Ile Ala Ile Pro 275 280 Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Asn 295 Ala Leu Lys Arg Gln Leu Ser Lys Lys Thr Phe Ser 310

<400> 1691 Met Leu Met Gly Gly Ala Asn Leu Ser Val Val Ser Glu Phe Val Phe Leu Gly Leu Thr Asn Ser Trp Asp Ile Gln Leu Leu Phe Val Phe 25 Ser Ser Val Phe Tyr Val Ala Ser Met Met Gly Asn Ser Leu Ile Ile Phe Thr Val Ala Ser Asp Pro His Leu His Thr Pro Met Tyr Phe Leu 55 Leu Ala Asn Leu Ser Phe Ile Asp Leu Gly Val Ser Ser Val Thr Ser 70 75 Pro Lys Met Ile Tyr Asp Leu Phe Arg Lys His Lys Val Ile Ser Phe 85 90 Thr Gly Cys Val Ile Gln Ile Phe Ser Ile His Val Ile Gly Gly Val 105 Glu Met Val Leu Leu Ile Ala Met Ala Phe Asp Arg Tyr Val Ala Ile 120 Cys Lys Pro Leu His Tyr Leu Thr Ile Leu Ser Pro Arg Met Cys Leu 135 140 Phe Phe Val Val Ile Ala Trp Ile Val Gly Leu Ile His Ser Leu Ala 150 155 Gln Leu Val Phe Val Ile Asn Leu Pro Phe Cys Gly Pro Asn Val Leu 165 170 Asp Ser Phe Tyr Cys Asp Leu Pro Arg Phe Ile Lys Leu Ala Cys Val 180 185 Asp Thr His Lys Leu Glu Phe Met Val Thr Ala Asn Ser Gly Phe Ile 200 205 Ser Val Gly Ser Phe Phe Ile Leu Ile Val Ser Tyr Ile Val Ile Ile 215 Ile Ser Val Gln Lys His Ser Ser Gly Gly Phe Ser Lys Ala Leu Ser 235 230 Thr Leu Ser Ala His Ile Ser Val Val Leu Phe Phe Gly Pro Leu 245 250 Ile Phe Val Tyr Thr Trp Pro Thr Pro Ser Val His Leu Asp Lys Phe 260 265 Leu Ala Ile Phe Asp Ala Val Ile Thr Pro Phe Leu Asn Pro Val Ile 280 Tyr Thr Phe Arg Asn Gln Glu Met Lys Met Ala Met Lys Arg Val Phe 295 Lys Gln Leu Leu Ser Tyr Arg Lys Ile Ser 310

<210> 1692

<211> 314

<212> PRT

<213> Mus musculus

<400> 1692

Met Ala Gly Arg Asn Tyr Thr Phe Val Thr Glu Phe Phe Leu Thr Ala 1 5 10 15

Phe Thr Glu His Pro Glu Trp Gly Leu Pro Leu Phe Leu Leu Phe Leu 20 25 30

Ser Phe Tyr Leu Ala Thr Leu Leu Gly Asn Thr Gly Met Ile Ile Leu

```
35
                            40
Ile Gln Lys Asn Arg Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser
                       55
His Leu Ser Phe Val Asp Ile Cys Tyr Ser Ser Val Ile Ile Pro Gln
Met Leu Ala Val Leu Trp Glu His Gly Ser Thr Ile Ser Gln Val Arg
                                    90
                8.5
Cys Ala Val Gln Phe Phe Leu Phe Thr Phe Phe Ala Ser Ile Asp Cys
                               105
Tyr Leu Leu Ala Ile Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Gln
                           120
                                                125
Pro Leu Leu Tyr Val Thr Ile Met Thr Glu Lys Ala Arg Val Gly Leu
                       135
                                           140
Val Thr Gly Ala Tyr Val Ala Gly Phe Ser Ser Gly Phe Ile Arg Thr
                   150
                                       155
Val Thr Ala Phe Thr Leu Ser Phe Cys Gly Asn Asn Glu Ile Asn Phe
               165
                                   170
Ile Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Val Cys Gly Asp Ser
                                185
Tyr Ile Gln Glu Val Val Ile Ile Val Phe Ala Ile Phe Val Met Pro
                            200
Ala Cys Ile Val Val Ile Ser Val Ser Tyr Leu Phe Ile Ile Val Ala
                       215
Ile Met Gln Ile Arg Ser Ala Gly Gly Arg Ala Lys Thr Phe Ser Thr
                    230
                                        235
Cys Thr Ser His Leu Thr Ala Val Ala Leu Phe Phe Gly Thr Leu Ile
                                    250
Phe Met Tyr Leu Arg Asp Asn Thr Asp Gln Phe Ser Glu Arg Asp Arg
           260
                                265
Val Val Ser Val Phe Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Ile Thr Lys Ser
                        295
Leu Arg Arg Ser Lys Ile Ser Arg Ala Pro
```

<211> 329

<212> PRT

<213> Mus musculus

<400> 1693

 Met
 Ile
 Ser
 Phe
 Asn
 Ile
 Arg
 Arg
 Ile
 Phe
 Val
 Val
 Ser
 Met
 Thr
 Trp

 Glu
 Asn
 His
 Ser
 Val
 Leu
 Met
 Glu
 Phe
 Val
 Phe
 Leu
 Ala
 Tyr
 Pro
 Asn

 Arg
 Leu
 Glu
 Leu
 Arg
 Met
 Phe
 Cys
 Phe
 Leu
 Gly
 Ile
 Ser
 Leu
 Ala
 Tyr

 Ala
 Leu
 Ile
 Ser
 Gly
 Asn
 Ile
 Leu
 Ile
 Met
 Val
 Ser
 Ile
 Gln
 Thr

 Follow
 Thr
 Arg
 Leu
 His
 Ser
 Pro
 Met
 Tyr
 Tyr
 Phe
 Leu
 Gly
 Ser
 Ile
 Gln
 Thr

 Glu
 Thr
 Arg
 Leu
 His
 Ser
 Pro
 Met
 Tyr
 Tyr
 Tyr
 Phe

```
Gln Met Val Phe Phe Ile Gly Leu Gly Ser Ala Asp Cys Phe Leu Leu
       115
                            120
                                                125
Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu Gln
                       135
                                            140
Tyr Pro Leu Ile Met Thr Val Thr Leu Cys Val Arg Leu Val Leu Ala
Ser Val Val Ile Gly Leu Val Leu Ser Leu Gln Leu Val Val Phe Ile
                                   170
                165
Phe Cys Leu Pro Phe Cys Gln Asp Arg Gly Ile Glu His Phe Phe Cys
                               185
Asp Val Pro Pro Val Met Arg Leu Val Cys Ala Thr Ser His Ile His
                           200
Glu Leu Ser Val Leu Val Ala Ala Ala Leu Ala Ile Ala Val Pro Phe
                        215
                                            220
Phe Phe Ile Ala Thr Thr Tyr Ala Leu Ile Val Ala Ala Val Leu Lys
                    230
                                       235
Leu His Ser Ala Ala Gly Arg His Arg Ala Phe Asn Thr Cys Ser Ser
                245
                                    250
His Leu Thr Val Val Leu Leu Gln Tyr Gly Cys Cys Ala Phe Met Tyr
                                265
Leu Arg Pro Asn Ser Ser Tyr His Pro Lys Lys Asp Gln Phe Ile Ser
                           280
Leu Val Tyr Thr Leu Gly Thr Pro Phe Leu Asn Pro Leu Ile Tyr Thr
                       295
Leu Arg Asn Asn Glu Met Lys Gly Ala Ile Glu Lys Val Leu Thr Arg
                                        315
                   310
Asn Tyr Phe Ser Gln Lys Asn Ile Gln
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1694

Met Ala Phe Leu Glu Asp Gly Asn His Thr Ala Val Thr Gly Phe Ile 5 Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Arg Val Val Leu Phe Val 25 Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr 40 Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe 55 60 Phe Leu Ser His Leu Ala Ser Ala Asp Ile Gly Tyr Ser Ser Val 75 Thr Pro Asn Met Leu Val Asn Phe Leu Val Glu Arg Asn Thr Ile Ser 90 85 Tyr Leu Gly Cys Gly Ile Gln Leu Gly Ser Ala Val Phe Phe Gly Thr 105 110 Val Glu Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Phe Ile Ala 120 Ile Cys Ser Pro Leu Leu Tyr Ser Asn Lys Met Ser Thr Gln Val Cys 135 140 Val Gln Leu Leu Val Gly Ser Tyr Ile Gly Gly Phe Leu Asn Ala Ser 150 155 Ser Phe Thr Leu Ser Phe Phe Ser Leu Val Phe Cys Gly Pro Asn Arg

```
165
                                  170
Val Asn His Phe Phe Cys Asp Phe Ala Pro Leu Val Lys Leu Ser Cys
                             185
Ser Asp Val Ser Val Pro Ala Val Val Pro Ser Phe Thr Ala Gly Ser
                           200
Ile Ile Ile Val Thr Ile Phe Val Ile Ala Val Ser Tyr Ile Tyr Ile
                       215
                                          220
Leu Ile Thr Ile Leu Lys Met Arg Ser Thr Glu Gly Arg Gln Lys Ala
               230
                                      235
Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly
              245
                               250
Thr Ile Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Tyr Ser Thr Asp
          260
                              265
Gln Asn Lys Val Val Ser Val Phe Tyr Met Val Val Pro Met Leu
      275
                          280
                                             285
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Gly Ala Leu
                      295
Lys Arg Gln Leu Ala Lys Asn Thr Phe Ser
                   310
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1695

Met 1	Ala	Phe	Leu	Glu 5	Val	Gly	Asn	His	Thr 10	Ala	Val	Thr	Glu	Phe 15	Ile
Leu	Leu	Gly	Leu 20	Thr	Asp	Asp	Pro	Val 25	Leu	Arg	Val	Val	Leu 30	Phe	Thr
		35	-		Tyr		40				-	45			
Ile	Leu 50	Leu	Ile	Arg	Val	Ser 55	Ser	Gln	Leu	His	His 60	Pro	Met	Tyr	Phe
Phe 65	Leu	Ser	His	Leu	Ala 70	Ser	Val	Asp	Met	Gly 75	Leu	Ser	Ser	Ser	Val 80
Thr	Pro	Asn	Met	Leu 85	Leu	Asn	Phe	Leu	Ile 90	Glu	Arg	Asn	Thr	Ile 95	Ser
Tyr	Leu	Gly	Cys 100	Gly	Ile	Gln	Gln	Ser 105	Leu	Ala	Asp	Phe	Phe 110	Gly	Ser
Val	Glu	Cys 115	Phe	Leu	Leu	Ala	Ala 120		Ala		Asp	Arg 125	Phe	Met	Ala
Ile	Cys 130	Asn	Pro	Leu	Leu	Tyr 135	Ser	Thr	Lys	Met	Ser 140	Thr	Lys	Val	Cys
Val 145	Gln	Leu	Val	Val	Gly 150	Ser	Tyr	Ile	Gly	Gly 155	Phe	Leu	Asn	Ala	Ser 160
Leu	Ile	Met	Phe	Tyr 165	Phe	Phe	Ser	Phe	Leu 170	Phe	Cys	Gly	Pro	Asn 175	Arg
Val	Asp	His	Phe 180	Phe	Cys	Asp	Phe	Ala 185	Pro	Leu	Val	Glu	Leu 190	Ser	Cys
Ser	Asp	Val 195	Ser	Val	Ser	Val	Ile 200	Val	Ile	Ser	Phe	Ser 205	Ala	Gly	Ser
Val	Thr 210	Met	Ile	Thr	Val	Phe 215	Val	Ile	Ala	Val	Ser 220	Tyr	Ser	Tyr	Ile
Leu 225	Ile	Thr	Ile	Leu	Lys 230	Met	His	Ser	Ile	Glu 235	Gly	Arg	His	Lys	Ala 240

 Phe
 Ser
 Thr
 Cys
 Thr
 Ser
 His
 Leu
 Thr
 Ala
 Val
 Thr
 Leu
 Tyr
 Tyr
 Gly

 245
 245
 245
 250
 250
 250
 255
 255

 Thr
 Ile
 Thr
 Phe
 Ile
 Tyr
 Val
 Met
 Phe
 Lys
 Ser
 Phe
 Ser
 Thr
 Asp
 Asp
 Met
 Ile
 Pro
 Met
 Leu
 Phe
 Leu
 Asp
 Asp
 Ile
 I

<210> 1696 <211> 314 <212> PRT <213> Mus musculus

<400> 1696

Met Ala Phe Leu Gln Asp Gly Asn His Thr Ala Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Asp Gly Pro Ile Leu Arg Val Ile Leu Phe Thr 25 Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr 40 Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe 55 Phe Leu Ser His Leu Ala Ser Val Asp Met Gly Leu Ser Ser Val 70 75 Thr Pro Asn Met Leu Val Asn Phe Leu Val Lys Gln Asn Thr Ile Ser 85 90 Tyr Ile Ala Cys Ser Ile Gln Phe Gly Leu Ala Ala Phe Phe Gly Thr 100 105 Val Glu Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Phe Val Ala 115 120 125 Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Ile Ser Thr Glu Ser Cys 135 140 Ile Gln Leu Val Val Gly Ser Tyr Ile Gly Gly Phe Leu Asn Ala Ser 150 155 Ser Phe Ile Leu Ser Phe Phe Ser Phe Ile Phe Cys Gly Pro Asn Arg 170 Ile Asn His Phe Tyr Cys Asp Leu Ala Pro Leu Val Glu Leu Ser Cys 180 185 Ser Asp Val Ser Val Ser Val Val Val Thr Ser Phe Ser Ala Gly Ser 195 200 205 Val Thr Val Ile Thr Val Phe Val Ile Ala Val Ser Tyr Ser Tyr Ile 215 220 Leu Ile Thr Ile Leu Lys Met His Ser Thr Glu Gly Arg His Lys Ala 230 235 Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly 250 Thr Ile Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Tyr Ser Thr Asp 265 Gln Asn Lys Val Val Ser Val Phe Tyr Met Val Val Ile Pro Met Leu 280 285 Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Gly Ala Ile 295 300 Lys Arg Gln Leu Gly Lys Lys Met Phe Cys

<400> 1698

```
<211> 310
<212> PRT
<213> Mus musculus
<400> 1697
Met Glu Pro Gly Asn His Thr Ala Val Thr Lys Phe Ile Leu Leu Gly
                                   10
Leu Thr Asp Asp Pro Thr Leu Cys Val Ile Phe Phe Val Phe Phe Leu
                               25
Gly Ile Tyr Ile Val Thr Leu Val Gly Asn Ile Ser Ile Ile Asn Leu
                           40
Val Arg Ser Cys Pro Gln Leu Gln Thr Pro Met Tyr Met Phe Leu Ser
His Leu Ala Phe Val Asp Ile Gly Tyr Ser Thr Ser Val Thr Pro Ile
                   70
                                        75
Met Leu Ile Gly Phe Ile Val His Glu Thr Gly Leu Pro Val His Ala
                                   90
Cys Glu Ala Gln Leu Cys Ser Val Val Thr Phe Gly Thr Ala Glu Cys
                               105
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Ser
                           120
Pro Leu Leu Tyr Ser Thr His Met Ser Ser Gln Ile Cys Leu Leu
                       135
                                           140
Val Gly Ala Ser Tyr Val Gly Gly Cys Val Asn Ala Trp Thr Phe Thr
                  150
                                       155
Gly Cys Leu Leu Ser Leu Ser Phe Cys Gly Pro Asn Lys Ile Asp His
              165
                                  170
Phe Phe Cys Asp Phe Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp Val
           180
                               185
Ser Ile Ile Gly Ile Ile Pro Ser Ile Ser Ala Gly Ser Ile Ile Val
                           200
Val Thr Val Phe Val Ile Ser Val Ser Tyr Ile Tyr Ile Leu Ile Thr
                       215
                                            220
Ile Leu Lys Met Arg Ser Thr Glu Gly Arg His Lys Ala Phe Ser Thr
                   230
                                       235
Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly Thr Ile Thr
                                   250
               245
Phe Ile Tyr Val Met Pro Lys Ser Ser Tyr Ser Thr Lys Gln Asn Arg
           260
                               265
Val Val Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Leu
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Arg Asp Val Lys Glu Ala Leu Arg Lys Ala
                       295
Thr Leu Arg Ile Tyr Ser
305
<210> 1698
<211> 315
<212> PRT
<213> Mus musculus
```

```
Met Ala Phe Leu Gln Asp Gly Asn His Thr Ala Val Thr Glu Phe Ile
                                    10
Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Arg Val Val Leu Phe Thr
                                25
Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Phe Gly Asn Leu Ser Thr
Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe
                        55
Phe Leu Ser His Leu Ala Ser Val Asp Ile Gly Ile Ser Ser Val
Thr Pro Ser Met Leu Val Asn Phe Leu Leu Glu Arg Ser Thr Ile Ser
                                    90
                85
Tyr Leu Gly Cys Gly Ile Gln Leu Gly Ser Ala Asp Phe Ile Ala Ser
            100
                                105
Val Glu Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Phe Met Ala
       115
                            120
                                                125
Val Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Gln Val Cys
                        135
                                            140
Val Gln Leu Val Val Gly Ser Tyr Ile Gly Gly Phe Leu Asn Ala Ser
                    150
                                        155
Leu Ile Val Thr Val Tyr Phe Phe Ser Phe Leu Phe Cys Gly Pro Asn
                                    170
                165
Arg Ile Asp His Phe Phe Cys Asp Phe Ala Pro Leu Ala Glu Leu Ser
           180
                                185
Cys Ser Asp Val Ser Val Ser Val Leu Ile Ile Ser Phe Ser Ala Gly
                            200
                                                205
Ser Val Thr Met Ile Thr Val Phe Val Ile Val Ile Ser Tyr Ser Tyr
                        215
Ile Leu Ile Thr Ile Leu Lys Met His Ser Thr Glu Gly Arg His Lys
                   230
                                        235
Ala Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr
                                    250
                245
Gly Thr Ile Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Phe Ser Thr
            260
                                265
Asp Gln Asn Lys Val Val Ser Val Phe Tyr Met Val Met Ile Pro Met
                            280
Leu Asn Pro Leu Ile Tyr Ser Leu Ser Asn Asn Glu Ile Lys Gly Ala
                       295
Leu Lys Arg Gln Leu Gly Met Lys Thr Leu Ser
                    310
```

<210> 1699 <211> 314 <212> PRT

<213> Mus musculus

<400> 1699

 Met Ala Phe Gln Glu Asp Gly Asn His Thr Ala Val Thr Glu Phe Val 1
 5
 5
 10
 15
 15

 Leu Phe Gly Leu Thr Asp Asp Pro 20
 25
 25
 30
 30

 Ile Phe Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr 35
 40
 45

 Ile Leu Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe 50
 55
 60

 Phe Leu Ser His Leu Ala Phe Ala Asp Ile Gly Tyr Ser Ser Ser Val

```
Thr Pro Asn Met Leu Val Asn Phe Leu Val Glu Arg His Thr Ile Ser
               85
                                   90
Tyr Ile Gly Cys Ala Ile Gln Leu Gly Ser Val Val Phe Phe Gly Ser
           100
                               105
Ser Glu Cys Phe Ile Leu Ala Ala Met Ala Tyr Asp Arg Phe Met Ala
                           120
                                                125
Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Gln Val Cys
                       135
                                           140
Val Gln Leu Leu Ile Ala Tyr Ile Gly Gly Phe Leu Asn Thr Trp
                   150
                                       155
Ser Phe Thr Ile Cys Phe Tyr Ser Leu Val Phe Cys Gly Pro Asn Gly
                                170
Val Asn His Phe Phe Cys Asp Phe Ala Pro Leu Ile Glu Leu Ser Cys
           180
                               185
Ser Asp Val Ser Val Pro Ala Thr Val Pro Ser Phe Thr Ala Gly Ser
                           200
Ile Ile Val Val Thr Val Ile Val Ile Ala Ile Ser Tyr Ile Tyr Ile
                        215
Leu Ile Thr Ile Leu Lys Met His Ser Thr Glu Gly Arg Gln Lys Ala
                    230
                                        235
Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly
                245
                                   250
Thr Ile Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Phe Ser Thr Asp
                               265
Gln Asn Lys Val Val Ser Val Phe Tyr Met Val Val Ile Pro Met Leu
                           280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Gly Ala Leu
                       295
Lys Arg Gln Ile Gly Arg Lys Ile Phe Ser
                    310
```

75

70

<210> 1700

<211> 323

65

<212> PRT

<213> Mus musculus

<400> 1700

Met Ala Phe Leu Glu Asp Gly Asn His Thr Ala Val Thr Glu Phe Ile 10 Leu Val Gly Leu Thr Asp Asp Pro Val Leu Lys Val Ile Leu Phe Thr 25 Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr 40 Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe 55 Phe Leu Ser His Leu Ala Ser Val Asp Leu Gly Tyr Ser Ser Val 75 Thr Pro Asn Met Leu Ile Asn Phe Leu Ala Glu Asn Asn Thr Ile Ser 85 90 Tyr Ile Gly Cys Ser Ile Gln Phe Gly Ser Ala Thr Phe Phe Gly Val 100 105 Leu Glu Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala 120 Ile Cys Asn Pro Leu Leu Tyr Ser Ile Lys Met Ser Thr Gln Val Cys 130 135 140

```
Val Lys Leu Val Val Gly Ser Tyr Ile Gly Ser Ser Leu Asn Ala Ser
                    150
                                        155
Phe Val Thr Val Ser Ile Phe Asn Leu Leu Phe Cys Gly Pro Asn Lys
                165
                                    170
Ile Asn His Phe Phe Cys Asp Phe Asp Pro Leu Ile Glu Leu Ser Cys
                                185
Ser Asp Val Ser Val Pro Val Ala Val Thr Ser Cys Ser Ala Gly Leu
        195
                            200
Ile Thr Met Ile Thr Val Phe Val Ile Ala Val Ser Tyr Thr Tyr Ile
                       215
Leu Ile Thr Val Leu Lys Met Arg Ser Thr Glu Gly Arg His Lys Ala
                    230
                                        235
Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly
                245
                                    250
Thr Val Thr Phe Ile Tyr Val Met Pro Lys Ser Asn Tyr Ser Thr Asp
                                265
Gln Asn Lys Val Val Ser Val Phe Tyr Met Val Val Ile Pro Met Leu
                            280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Gly Ala Leu
                        295
Lys Arg Gln Leu Gly Lys Lys Ile Phe Ser Gln Ser Asn Ile Leu Phe
                    310
                                        315
Cys Lys Ser
```

<210> 1701 <211> 314 <212> PRT

<213> Mus musculus

<400> 1701

Met Ala Phe Leu Asp Asn Gly Asn His Thr Ala Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Asp Asp Pro Phe Leu Arg Ile Val Leu Phe Ser 25 Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Phe Gly Asn Leu Ser Thr 40 Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe 55 Phe Leu Ser His Leu Ala Thr Val Asp Leu Gly Ile Ser Ser Val 75 Thr Pro Ser Met Leu Val Asn Phe Leu Ala Glu Arg Ser Thr Ile Ser 8.5 90 Tyr Leu Gly Cys Gly Ile Gln Leu Ser Ser Ala Ala Leu Phe Gly Thr 105 Leu Glu Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Met Ala 120 Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Leu Ser Thr Arg Phe Cys 130 135 140 Ile Gln Leu Val Val Gly Ser Tyr Ile Gly Ala Phe Leu Asn Asp Ser 150 155 Cys Tyr Ile Leu Ser Phe Ala Phe Phe Leu Phe Cys Gly Pro Asn Lys 165 170 Val Asp His Phe Phe Cys Asp Leu Ser Pro Met Met Glu Leu Ser Cys 185 Ser Asp Ala Ser Val Ser Gly Val Val Ile Ser Phe Thr Ala Gly Ser

```
195
                           200
                                                205
Ile Thr Met Thr Thr Leu Ile Val Ile Val Ile Ser Tyr Phe Tyr Ile
                       215
Leu Ile Thr Ile Leu Lys Met Arg Ser Thr Glu Gly Arg Gln Lys Ala
                                        235
                   230
Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly
               245
                                    250
Thr Ile Ile Phe Ile Tyr Val Met Pro Lys Ser Thr Tyr Ser Arg Asp
                               265
Gln Asn Lys Val Val Ser Leu Phe Tyr Met Val Val Ile Pro Met Leu
                           280
                                               285
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Gly Ala Leu
                       295
Lys Lys Gln Phe Tyr Arg Lys Thr Leu Leu
                   310
```

<210> 1702 <211> 315 <212> PRT

<213> Mus musculus

<400> 1702

Met Gly Tyr Thr Asn Leu Ser Tyr Leu Asn Pro Gly Thr Val Ile Leu Ile Gly Ile Pro Gly Leu Glu His Val Gln Phe Trp Ile Gly Phe Pro 25 Phe Phe Val Val Cys Leu Val Ala Leu Leu Gly Asn Leu Phe Leu Leu 40 Ile Ile Ile Pro Thr Glu Arg Ser Leu His Gln Pro Met Tyr Ile Phe 55 Leu Ala Val Leu Ala Ala Thr Asp Leu Gly Leu Cys Leu Ala Ile Ala 70 75 Pro Lys Met Leu Ala Ile Phe Trp Phe Gly Ser Cys Ser Met Ala Phe Asp Ala Cys Leu Thr Gln Leu Phe Phe Ile His Ala Leu Gln Gly Met 105 Glu Ser Gly Val Leu Leu Ala Met Ala Phe Asp Arg Tyr Val Ala Ile 120 Cys Asp Pro Leu Arg His Thr Ala Val Leu Thr Pro Leu Phe Leu Leu 135 140 Arg Val Val Leu Val Val Ala Ile Arg Ala Thr Val Leu Val Gly Val 150 155 Leu Pro Ile Leu Leu Lys Arg Leu Gln Trp Phe His Ser Val Val Ile 165 170 Val His Ser Tyr Cys Glu His Met Ala Val Val Lys Leu Ala Ala Glu 180 185 Asp Val Arg Ile Asn Lys Ser Tyr Gly Leu Phe Val Ala Phe Ala Ile 200 Leu Gly Phe Asp Met Ile Phe Val Phe Ile Ser Tyr Ile Leu Ile Phe 215 220 Arg Ala Val Phe Arg Leu Pro Gln Lys Glu Ala Arg Ser Lys Ala Phe 230 235 Asn Thr Cys Thr Ala His Ile Val Val Phe Leu Glu Phe Tyr Ile Leu 245 250 Ala Phe Phe Ser Phe Phe Ser His Arg Phe Gly His Val Ser Pro Tyr 260 265

 Val
 His
 Ile
 Leu
 Leu
 Ser
 Thr
 Ile
 Tyr
 Leu
 Leu
 Pro
 Pro
 Pro
 Ala
 Leu

 Asn
 Pro
 Ile
 Val
 Tyr
 Gly
 Val
 Lys
 Thr
 Lys
 Glu
 Ile
 Arg
 Lys
 Trp
 Val

 Val
 Gln
 Ile
 Phe
 Val
 Leu
 Lys
 Ser
 Asn
 Thr
 Gln

 305
 310
 315
 315

<210> 1703 <211> 308 <212> PRT <213> Mus musculus

<400> 1703

Met Lys Asn Ile Thr Glu Ala Thr Phe Phe Val Leu Lys Gly Leu Thr 10 Asp Asn Asn Glu Leu Gln Ile Ile Leu Phe Phe Leu Phe Leu Ala Ile 25 Tyr Leu Phe Thr Leu Ile Gly Asn Val Gly Leu Ile Ile Leu Val Val Gly Asp Pro Gln Leu His Asn Pro Met Tyr Cys Phe Leu Ser Ala Leu 55 Ser Phe Val Asp Ala Cys Tyr Ser Ser Asp Ile Thr Pro Asn Met Leu 70 Val Gly Phe Met Ser Lys Ser Lys Ile Ile Ser Phe Tyr Gly Cys Ala 85 90 Thr Gln Met Phe Leu Ala Val Thr Phe Gly Thr Thr Glu Cys Phe Leu 105 100 Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile His Asp Pro Leu 120 125 Leu Tyr Ala Val Ser Met Ser Pro Arg Val Tyr Leu Pro Leu Ile Ile 135 Ala Ser Tyr Ala Gly Gly Ile Val His Ala Ile Ile His Thr Val Ala 150 155 Thr Phe Ser Leu Ser Phe Cys Gln Ser Asn Glu Val Lys His Ile Phe 170 165 Cys Asp Ile Pro Pro Leu Leu Ala Ile Ser Cys Ser Glu Thr Tyr Val 185 Asn Glu Leu Leu Phe Phe Phe Val Ser Phe Ile Glu Leu Val Thr 200 205 Ile Leu Ile Ile Leu Phe Ser Tyr Ala Phe Ile Leu Leu Ser Ile Leu 215 220 Lys Met Asn Ser Ala Glu Gly Arg Arg Lys Val Phe Ser Thr Cys Gly 230 235 Ser His Leu Thr Ala Val Ser Ile Cys Tyr Gly Thr Ser Leu Phe Met 250 Tyr Val Arg Pro Ser Ser Asn Tyr Ser Leu Glu His Asp Met Ile Val 260 265 Ser Thr Phe Tyr Thr Ile Gly Ile Pro Met Leu Asn Pro Ile Ile Tyr 280 285 Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Ile Lys Arg Val Leu Arg 290 295 Lys Asn Phe Ile 305

```
<211> 319
<212> PRT
<213> Mus musculus
<400> 1704
Met Lys Asn Gln Ser Val Glu Ile Ile Phe Ile Leu Leu Gly Leu Thr
                                    10
Asp Asp Pro Gln Leu Gln Ile Pro Ile Phe Leu Phe Leu Phe Asn
                                25
Tyr Ile Leu Ser Leu Met Gly Asn Leu Val Ile Ile Leu Leu Thr Leu
                           40
Leu Asp Pro Arg Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
                       55
Ser Phe Leu Glu Ile Ala Phe Thr Thr Ala Cys Ile Pro Arg Phe Leu
                   70
                                       75
Met Ser Ile Leu Thr Gly Asp Arg Thr Ile Ser Tyr Asn Ala Cys Ala
                                    90
Ala Gln Leu Phe Phe Phe Leu Ser Leu Ile Thr Glu Phe Tyr Leu
                                105
Leu Ala Ala Met Ser Tyr Asp Arg Phe Val Ala Ile Cys Arg Pro Leu
                            120
                                                125
His Tyr Pro Ile Ile Met Asn Ser Lys Val Cys His Leu Leu Val Leu
                       135
Ser Ser Trp Val Thr Gly Phe Phe Val Ile Phe Pro Pro Leu Leu Leu
                   150
                                        155
Gly Leu Lys Leu Asp Phe Cys Ala Ser Lys Thr Ile Asp His Phe Leu
               165
                                    170
Cys Asp Thr Ser Pro Val Leu Gln Leu Ser Cys Thr Asp Thr Arg Phe
                               185
           180
                                                   190
Ile Glu Leu Met Ala Phe Ala Leu Ala Val Met Thr Leu Ile Ile Thr
                           200
                                               205
Leu Ile Leu Val Ile Leu Ser Tyr Thr Leu Ile Ile Lys Thr Ile Leu
                       215
                                            220
Lys Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                    230
Ser His Met Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Met
                                    250
               245
Tyr Met Lys Thr Ser Ala Lys Glu Arg Val Ser Leu Asn Lys Gly Val
                               265
Ala Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
                           280
                                                285
Thr Leu Arg Asn Gln Gln Val Lys Asp Ala Phe Lys Gln Val Leu His
                       295
                                            300
Arg Met Cys Tyr Ser Gln Asn Ser Glu Leu Arg Phe Arg Pro Lys
                    310
                                        315
<210> 1705
<211> 311
<212> PRT
<213> Mus musculus
<400> 1705
Met Arg Asn Arg Thr Val Thr Thr Phe Ile Leu Leu Gly Leu Thr Asp
                -5
                                    10
Asp Ile Arg Leu Gln Ile Leu Leu Phe Ile Phe Leu Leu Ser Ser Tyr
```

25

20

```
Met Leu Ser Leu Ser Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu Ile
Asp Pro His Leu Lys Thr Pro Met Tyr Ile Phe Leu Lys Asn Phe Ser
Phe Leu Glu Ile Ser Leu Thr Thr Ala Cys Ile Pro Arg Phe Leu Tyr
Ser Ile Ser Ser Gly Asp Lys Ser Ile Thr Tyr Ile Ala Cys Ala Ser
                                    90
Gln Leu Leu Phe Ile Asp Leu Phe Ala Val Thr Glu Phe Phe Leu Leu
                                105
Ala Ile Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His
                            120
Tyr Met Thr Ile Met Asn Ser Arg Val Cys Lys Asn Phe Ile Phe Ser
                       135
                                           140
Cys Trp Val Ala Ala Leu Ile Ile Ile Leu Pro Pro Ile Gly Leu Gly
                    150
                                        155
Leu Gly Leu Glu Phe Cys Asp Ser Asp Ile Ile Asp His Phe Cys Cys
                                    170
                165
Asp Ala Ala Pro Leu Leu Lys Ile Ser Cys Ser Asp Thr Trp Leu Ile
            180
                                185
                                                    190
Glu Gln Met Val Ile Ala Gly Ala Val Leu Thr Phe Ile Ile Thr Phe
                           200
Val Cys Val Val Leu Ser Tyr Val Tyr Ile Ile Lys Thr Ile Leu Arg
                        215
                                            220
Phe Pro Ser Ala Lys Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser
                   230
                                        235
His Met Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile Tyr
                                    250
               245
Val Lys Pro Ser Ser Lys Asp Asp Val Ala Ile Asn Lys Gly Ile Ser
                               265
Leu Leu Ile Ile Ser Ile Ser Pro Met Met Asn Pro Phe Ile Tyr Ala
                            280
Leu Arg Asn Lys Gln Val Lys Gln Ala Phe Asn Tyr Ser Ile Lys Lys
                        295
Ile Ala Phe Leu Ser Lys Met
```

```
<210> 1706
```

<400> 1706

 Met
 Lys
 Asn
 His
 Ser
 Val
 Ile
 Thr
 Glu
 Phe
 Leu
 Leu
 Leu
 Gly
 Ile
 Ser

 Asp
 Thr
 Pro
 Glu
 Leu
 Gln
 Phe
 Val
 Ile
 Phe
 Ile
 Phe
 Leu
 Phe
 Ile
 Ala
 Ala
 Ala
 Ala
 Ile
 Phe
 Ile
 Ile

<211> 299

<212> PRT

<213> Mus musculus

```
100
                               105
Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                    120
His Tyr Thr Leu Ile Met Asn Gln Lys Val Cys Thr Leu Leu Val Leu
                       135
Thr Ser Trp Leu Gly Gly Phe Leu Thr Ile Phe Pro Leu Leu Met Leu
                   150
                                       155
Phe Leu Lys Leu Asp Phe Cys Ala Ser Asn Val Ile Asp His Phe Cys
               165
                                   170
Cys Asp Tyr Phe Pro Ile Leu Gln Leu Ser Cys Ser Asp Thr Trp Phe
                               185
Leu Glu Thr Ile Gly Phe Tyr Phe Ala Phe Ile Thr Leu Leu Phe Thr
                           200
Leu Ala Leu Val Ile Leu Ser Tyr Ile Cys Ile Ile Asn Thr Ile Leu
                       215
                                           220
Arg Phe Pro Ser Ala Ser Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                   230
                                       235
Ser His Met Ile Val Ile Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met
                                    250
                245
Tyr Val Lys Pro Ser Ala Asn Glu Arg Ala Ser Leu Thr Lys Gly Val
                               265
Ala Leu Leu Asn Thr Ser Ile Ala Pro His Ala Glu Pro Phe Tyr Leu
                           280
His Leu Glu Lys Ser Thr Ser Lys Thr Ser Phe
                       295
```

<210> 1707 <211> 323

<212> PRT

<213> Mus musculus

<400> 1707

Met Leu His Val Asn Ile Thr Asn Pro Ile Phe Ser Thr Phe Leu Val Thr Gly Ile Pro Gly Leu Glu Ala Val Tyr Ile Trp Ile Ala Ile Pro 25 Phe Cys Ala Met Phe Leu Ile Thr Met Val Gly Asn Met Thr Ile Ile 40 Ile Val Ile Trp His Glu Gln Thr Leu His Val Pro Met Tyr Leu Phe 55 Leu Ala Met Leu Ala Ser Ser Asp Leu Gly Leu Ser Leu Phe Thr Phe 70 75 Pro Thr Leu Leu Arg Ile Phe Leu Leu Asn Asp Arg Glu Leu Thr Thr 8.5 90 Thr Ala Cys Phe Thr Gln Met Phe Phe Ile His Thr Phe Gln Leu Leu 105 Glu Ser Ala Ile Ile Leu Ala Met Ala Phe Asp Trp Tyr Val Ala Ile 120 125 Ser His Pro Leu His Tyr His Ser Ile Leu Thr Asp Thr Val Ile Gly 135 140 Lys Ile Gly Leu Thr Ile Val Gly Arg Thr Leu Thr Leu Gln Val Pro 150 155 Ala Pro Ile Leu Leu Arg Arg Leu Tyr Phe Cys Ser Ser Asn Val Leu 165 170 Ser His Ser Tyr Cys Leu His Pro Asp Ile Ile Lys Leu Ser Cys Ser 185

```
Ser Thr Thr Val Asn Ser Ile Phe Gly Leu Phe Val Val Leu Ser Thr
                            200
       195
                                                205
Leu Gly Leu Asp Phe Leu Leu Ile Leu Leu Ser Tyr Ala Leu Ile Leu
                                            220
                        215
Lys Thr Val Leu Asn Met Ala Ser His Ser Gly Arg Leu Lys Ala Leu
                    230
                                        235
Asn Thr Cys Ile Ser His Leu Cys Ala Val Val Leu Phe Phe Thr Pro
                                    250
                245
Met Ile Cys Leu Ser Met Leu His Arg Phe Gly Pro Arg Leu Pro Ser
                               265
His Val Tyr Val Thr Leu Ala Asn Met His Phe Leu Ile Pro Pro Val
       275
                            280
                                                285
Met Asn Pro Ile Val Tyr Val Val Lys Thr Lys Gln Ile Arg Asp Lys
                       295
                                            300
Ile Gln Lys Leu Phe Ile Arg Lys Ala Thr Lys Lys Ala Gln Ala Ala
                   310
                                        315
Ser Ile Thr
```

<210> 1708 <211> 310 <212> PRT

<213> Mus musculus

<400> 1708

Met Gly Gln Asn Asp Ser Ser Val Val Glu Phe Ile Leu Leu Gly Phe 10 Ser His Phe Pro Glu Leu Gln Val His Met Phe Gly Ala Phe Leu Val 25 Ile Tyr Leu Val Thr Leu Thr Gly Asn Ala Thr Ile Val Thr Val Ile Phe Leu Asp His Ser Leu His Ile Pro Met Tyr Leu Phe Leu Gln Asn 55 Leu Ser Val Val Glu Ala Ser Phe Ser Thr Thr Val Met Pro Glu Met 70 75 Leu Val Val Leu Thr Ser Glu Lys Ala Thr Ile Ser Phe Gly Gly Cys 90 Phe Ala Gln Thr Tyr Phe Ile Leu Leu Phe Gly Gly Thr Glu Cys Phe 100 105 Leu Leu Gly Ala Met Ala Tyr Asp Arg Phe Ala Ala Ile Cys Tyr Pro 120 Leu Thr Tyr Pro Met Ile Met Ser Lys Arg Ile Phe Val Lys Leu Val 130 135 140 Val Cys Ser Trp Val Leu Gly Ile Met Thr Ala Thr Val Ser Val Thr 150 155 Trp Val Phe Ser Phe Pro Phe Cys Gly Pro Ser Lys Ile Asn His Ile 165 170 Ser Cys Glu Val Pro Ala Val Leu Glu Leu Ala Cys Ala Asp Thr Phe 180 185 190 Leu Phe Glu Val Tyr Ser Phe Thr Gly Thr Ile Leu Leu Val Leu Val 200 205 Pro Phe Leu Leu Ile Leu Ser Tyr Thr Gln Ile Leu Phe Thr Val 215 220 Leu Arg Met Pro Ser Thr Thr Gly Arg Gln Lys Ala Phe Ser Thr Cys 230 235 Ala Ser His Leu Thr Ser Val Thr Leu Phe Tyr Ser Thr Ala Cys Met

```
245
                                    250
Thr Tyr Leu Gln Pro Lys Ser Lys Tyr Ser Pro Asp Thr Lys Lys Leu
                               265
Met Ser Leu Ala Tyr Ser Leu Leu Thr Pro Leu Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Met Lys Arg Ala Val Val Lys Leu Cys
                       295
Gln Ile Lys Val Val Phe
<210> 1709
<211> 314
<212> PRT
<213> Mus musculus
<400> 1709
Met Arg Arg Gln Asn His Asn Ser Thr Val Glu Phe Ile Leu Leu Gly
Phe Ser Asn Tyr Pro Glu Leu Gln Gly Gln Met Phe Gly Ala Phe Leu
            20
                                25
Val Ile Tyr Leu Val Thr Val Leu Gly Asn Ala Ile Ile Ile Thr Ile
                           40
Ile Phe Leu Asp Gln Ser Leu His Ile Pro Met Tyr Leu Phe Leu Gln
                        5.5
Asn Leu Ser Leu Val Asp Leu Cys Phe Ser Thr Val Ile Thr Pro Glu
                   70
                                        75
Ile Leu Val Val Leu Thr Ser Glu Lys Ala Thr Ile Ser Phe Gly Gly
               8.5
                                    90
Cys Phe Val Gln Met Tyr Phe Ile Leu Leu Phe Gly Gly Thr Glu Cys
                                105
Phe Leu Leu Gly Ala Met Ala Tyr Asp Arg Phe Ala Ala Ile Cys His
                            120
Pro Leu Ser Tyr Pro Val Ile Met Asn Lys Ser Val Phe Val Lys Leu
                        135
Val Met Phe Ser Trp Val Ser Gly Thr Met Met Thr Thr Leu Gln Thr
                   150
                                        155
Thr Trp Val Phe Ser Phe Pro Tyr Cys Asp His Lys Glu Ile Asn His
               165
                                   170
Leu Phe Cys Glu Thr Pro Pro Val Leu Glu Leu Ala Cys Ala Asp Thr
           180
                                185
Phe Leu Phe Glu Val Tyr Ala Phe Thr Gly Thr Ile Leu Ile Val Met
                            200
       195
Val Pro Phe Leu Leu Ile Leu Leu Ser Tyr Thr Arg Ile Leu Phe Ser
                        215
                                            220
Ile Leu Arg Met Pro Ser Thr Thr Gly Arg Gln Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Ser Val Thr Leu Phe Tyr Gly Thr Ala Ser
                                    250
Ile Thr Tyr Leu Gln Pro Lys Ser Arg Tyr Ser Pro Asp Thr Lys Lys
            260
                               265
Leu Met Ser Leu Ala Tyr Thr Leu Leu Thr Pro Leu Leu Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Glu Met Lys Arg Ala Val Lys Leu
                       295
                                            300
Trp Gln Arg Lys Val Thr Leu His Thr Gly
                    310
```

```
<211> 326
<212> PRT
<213> Mus musculus
<400> 1710
Met Ser Leu Arg Gln Thr Gln Gly Ser Asn Ile Val Met Arg Arg Gln
Asn His Ser Ser Thr Val Glu Phe Ile Leu Leu Arg Phe Ser Asn Tyr
                                25
Pro Glu Leu Gln Asp Gln Met Phe Gly Thr Phe Leu Val Ile Tyr Leu
                            40
                                                45
Val Thr Val Met Gly Asn Ala Ile Ile Ile Thr Ile Ile Phe Leu Asp
                        55
Gln Ser Leu His Ile Pro Met Tyr Leu Phe Leu Gln Asn Leu Ser Leu
                    70
                                        75
Val Asp Leu Cys Phe Ser Thr Val Ile Thr Pro Lys Met Leu Val Val
Leu Thr Ser Lys Lys Ala Thr Ile Ser Phe Gly Gly Cys Phe Ala Gln
            100
                                105
Met Tyr Phe Ile Leu Phe Phe Gly Val Thr Glu Cys Phe Leu Leu Gly
                           120
Ala Met Ala Tyr Asp Arg Phe Ala Ala Ile Cys His Pro Leu Ser Tyr
                       135
                                           140
Pro Met Ile Met Asn Lys Arg Val Phe Met Lys Leu Val Met Phe Ser
                   150
                                       155
Trp Val Ser Gly Thr Met Met Ser Thr Leu Gln Thr Trp Val Phe
               165
                                   170
Ser Phe Pro Tyr Cys Asp His Lys Glu Ile Asn His Leu Phe Cys Glu
                               185
Thr Pro Pro Val Leu Glu Leu Ala Cys Ala Asp Thr Phe Leu Phe Glu
                            200
Val Tyr Ala Phe Thr Gly Thr Ile Phe Ile Val Met Val Pro Phe Leu
                        215
                                            220
Leu Ile Leu Leu Ser Tyr Thr Arg Ile Leu Phe Thr Ile Leu Arg Met
                   230
                                        235
Pro Ser Thr Thr Gly Arg Gln Lys Ala Phe Ser Thr Cys Ala Ser His
                245
                                    250
Leu Thr Ser Val Thr Leu Phe Tyr Gly Thr Ala Ser Ile Ile Tyr Leu
                                265
Gln Pro Lys Ser Arg Tyr Ser Pro Asp Thr Lys Lys Leu Met Ser Leu
                           280
                                               285
Ala Tyr Ile Leu Leu Thr Pro Leu Leu Asn Pro Leu Ile Tyr Ser Leu
                       295
Arg Asn Lys Glu Met Lys Arg Ala Val Leu Lys Leu Trp Gln Arg Lys
                    310
                                        315
                                                            320
Val Ala Phe His Thr Ala
                325
```

<210> 1710

<211> 309

<212> PRT

<213> Mus musculus

```
<400> 1711
Met Gly Arg Gly Asn Arg Thr Thr Val Thr Glu Phe Val Leu Met Gly
Phe Thr Asp Arg Pro Glu Leu Gln Leu Pro Leu Phe Val Val Phe Leu
Ile Leu Ile Thr Leu Val Gly Asn Leu Gly Met Ile Leu Leu Ile Lys
Ala Asp Ser Arg Leu His Thr Pro Met Tyr Tyr Phe Leu Ser His Leu
                        55
Ala Phe Ile Asp Leu Cys Tyr Ser Ser Ser Ile Gly Pro Lys Met Leu
                                        75
Gln Asn Leu Leu Val Lys Lys Thr Ile Ser Phe Ser Gly Cys Phe
                                    90
Ala Gln Leu Tyr Phe Ser Ser Ala Phe Val Thr Thr Glu Cys Phe Leu
           100
                               105
Leu Ala Thr Met Ala Tyr Asp Arg Tyr Met Ala Ile Cys Asn Pro Leu
                            120
Thr Tyr Thr Ala Ile Met Thr Gln Arg Val Cys Lys Glu Leu Val Ile
                        135
Gly Val Tyr Thr Tyr Gly Phe Leu Asn Ser Val Ile Gln Thr Val Leu
                    150
                                        155
Thr Phe Gln Leu Ser Phe Cys Asn Ser Asn Val Ile His His Phe Tyr
                165
                                    170
Cys Ala Asp Pro Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr His Asn
                                185
Lys Glu Arg Gln Leu Leu Ile Phe Ser Ala Val Asn Leu Thr Gly Ser
       195
                           200
Leu Met Thr Val Leu Ile Ser Tyr Ile Cys Ile Leu Val Ser Ile Ile
                        215
                                            220
Lys Ile Glu Pro Ser Gln Gly Lys Cys Lys Ala Phe Ser Thr Cys Ala
                    230
                                        235
Ser His Leu Thr Val Val Thr Ile Phe Tyr Gly Thr Leu Phe Phe Met
                245
                                    250
Tyr Met Arg Gln Pro Lys Thr Gly Ser Ser Trp Lys Tyr Ser Lys Val
                                265
Ile Ser Val Phe Tyr Ser Leu Val Ile Pro Met Leu Asn Pro Leu Ile
                           280
                                                285
Tyr Ser Leu Arg Asn Thr Glu Val Lys Asp Thr Leu Lys Lys Met Leu
Glu Gly Lys Thr Ser
305
<210> 1712
<211> 312
<212> PRT
<213> Mus musculus
<400> 1712
Met Gly Thr Gly Asn Trp Ser Gln Val Ile Glu Phe Ile Ile Leu Gly
                                    10
Phe Pro His Phe Gln Gly Val Gln Ile Tyr Leu Phe Phe Leu Leu Leu
Ser Ile Tyr Leu Thr Thr Ile Leu Gly Asn Leu Leu Ile Phe Leu Val
                           40
Val Tyr Leu Asp Ser Arg Leu His Thr Pro Met Tyr Arg Phe Val Ser
```

```
Ile Leu Ser Phe Leu Glu Leu Gly Tyr Thr Ala Ala Thr Ile Pro Lys
                    70
                                       75
Met Leu Ala Asn Leu Leu Ser Glu Lys Lys Thr Ile Ser Phe Ser Gly
                                    90
                85
Cys Leu Leu Gln Ile Tyr Phe Phe His Ser Leu Gly Ala Thr Glu Cys
Tyr Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Arg
                           120
Pro Leu His Tyr Pro Thr Leu Met Thr Gln Ser Leu Cys Ile Lys Ile
                       135
Ala Ile Gly Cys Trp Leu Gly Gly Leu Ala Gly Pro Val Val Glu Ile
                   150
                                       155
Ser Leu Val Ser Arg Leu Pro Phe Cys Gly Pro Asn His Ile Gln His
                                   170
               165
Ile Phe Cys Asp Phe Pro Pro Val Leu Ser Leu Ala Cys Thr Asp Thr
           180
                               185
Ser Val Asn Val Leu Val Asp Phe Ile Ile Asn Ser Cys Lys Ile Leu
                           200
                                               205
Ala Thr Phe Leu Leu Ile Leu Ser Ser Tyr Leu Gln Ile Ile Arg Thr
                        215
                                           220
Val Leu Lys Ile Pro Ser Ala Ala Gly Lys Lys Ala Phe Ser Thr
                   230
                                        235
Cys Ala Ser His Leu Thr Val Val Leu Ile Phe Tyr Gly Ser Ile Leu
                                   250
Phe Met Tyr Val Arg Leu Lys Lys Ser Tyr Ser Leu Asp Tyr Asp Arg
           260
                               265
                                                   270
Ala Leu Ala Val Val Tyr Ser Val Ile Thr Pro Phe Leu Asn Pro Phe
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Glu Ala Leu Lys Arg Gln
                       295
                                           300
Leu Met Arg Thr Gly Ile Leu Arg
```

<210> 1713 <211> 315

<212> PRT

<213> Mus musculus

<400> 1713

Met Arg Ile Asn Arg Ser Thr Ser Val Thr Glu Phe Leu Phe Ser Gly Phe Pro Gln Phe Glu Asp Gly Ser Phe Leu Phe Phe Ile Pro Leu Phe 20 25 Phe Ile Tyr Ile Phe Ile Val Ile Gly Asn Leu Ile Val Phe Phe Ala 40 45 Val Arg Met Asp Thr Arg Leu His Asn Pro Met Tyr Asn Phe Ile Ser 55 Ile Phe Ser Phe Leu Glu Ile Trp Tyr Thr Thr Ala Thr Ile Pro Lys 75 Met Leu Thr Asn Leu Ile Ser Lys Gln Arg Thr Ile Ser Leu Ile Gly 85 90 Cys Leu Leu Gln Met Tyr Phe Phe His Ser Leu Gly Asn Ser Glu Gly 105 110 Ile Leu Leu Thr Thr Met Ala Ile Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Arg Tyr Pro Thr Ile Met Thr Pro Arg Leu Cys Ala Gln Leu

```
130
                       135
Ser Ala Gly Ser Cys Ile Phe Gly Phe Leu Val Leu Leu Pro Glu Ile
                  150
                                       155
Ala Trp Ile Ser Thr Leu Pro Phe Cys Gly Pro Asn Gln Ile His Gln
                165
                                    170
Ile Phe Cys Asp Phe Glu Pro Val Leu Arg Leu Ala Cys Thr Asp Thr
                                185
Ser Met Ile Leu Val Glu Asp Val Val His Ala Val Ala Ile Ile Phe
                           200
                                               205
Ser Val Leu Val Ile Ala Ile Ser Tyr Met Arg Ile Ile Thr Val Ile
                       215
                                            220
Leu Arg Ile Pro Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys
                   230
                                        235
Ala Ala His Leu Gly Val Phe Leu Met Phe Tyr Gly Ser Val Ser Leu
               245
                                   250
Met Tyr Leu Arg Phe Ser Ala Thr Phe Pro Pro Ile Leu Asp Thr Ala
                                265
Ile Ala Leu Met Phe Ala Val Leu Ala Pro Phe Phe Asn Pro Ile Ile
        275
                            280
Tyr Ser Leu Arg Asn Lys Asp Met Lys Ile Ala Ile Lys Lys Leu Leu
                        295
Cys Ser Gln Lys Met Leu Pro Thr Ser Ala Ser
                    310
```

<211> 315

<212> PRT

<213> Mus musculus

<400> 1714

Met Glu Asn Gly Asn Leu Ser Thr Val Thr Val Phe Val Phe Thr Gly 10 Phe Pro Gln Leu Lys Asn Gly Gly Leu Leu Tyr Phe Phe Pro Leu Leu Phe Ile Tyr Ile Phe Ile Val Thr Gly Asn Leu Met Ile Phe Phe Ala 40 Val Arg Leu Asp Thr Arg Leu His Asn Pro Met Tyr Asn Phe Ile Ser 55 Ile Phe Ser Phe Leu Glu Met Trp Tyr Thr Thr Ala Thr Ile Pro Lys 70 75 Met Leu Ser Asn Leu Ile Ser Glu Gln Lys Thr Ile Ser Phe Ile Gly Cys Leu Gln Met Tyr Phe Phe His Ser Leu Gly Asn Thr Glu Gly 105 Thr Leu Leu Thr Val Met Ala Ile Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Arg Tyr Pro Asn Ile Met Thr Pro Arg Leu Cys Ala Gln Leu 135 Thr Ala Gly Ser Cys Val Phe Gly Phe Leu Ile Leu Leu Pro Glu Ile 150 155 Val Trp Ile Ser Thr Leu Pro Phe Cys Gly Pro Asn Gln Ile Thr Gln 165 170 Ile Phe Cys Asp Phe Thr Pro Leu Leu Lys Leu Ala Cys Thr Asp Ala 180 185 190 Ser Val Ile Leu Val Gln Asp Val Ile His Ala Leu Ala Ile Leu Ile 200

```
Thr Ser Leu Ile Ile Ser Leu Ser Tyr Ile Arg Ile Ile Val Val Ile
                       215
                                            220
Leu Ser Ile Ser Ser Thr Glu Gly Arg Lys Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ala Ala His Ile Ala Val Phe Leu Leu Phe Phe Gly Ser Val Ala Leu
                                    250
Met Tyr Leu Arg Phe Ser Ala Thr Tyr Thr Pro Phe Trp Asp Asn Thr
                               265
Ile Ala Leu Thr Phe Ser Val Phe Ala Pro Leu Phe Asn Pro Ile Ile
                            280
Tyr Ser Leu Arg Asn Lys Asp Met Lys Asp Ala Ile Asn Lys Leu Ile
                      295
Cys Ser Gln Lys Val Ser Asn Glu Ser Arg Arg
                    310
```

<210> 1715 <211> 318 <212> PRT <213> Mus musculus

<400> 1715

Met Thr Gln Leu Val Ala Ser Gln Asn Gln Thr Met Val Ile Glu Phe Leu Phe Ser Val Phe Pro Pro Leu Tyr Glu Gly Gly Leu Leu Phe Phe 25 Ile Leu Leu Ile Leu Val Tyr Ala Phe Ile Ile Ser Gly Asn Leu Val 40 Ile Phe Val Ala Val Gln Leu Asp Met Ala Leu His Thr Pro Met Tyr 55 Phe Phe Ile Ser Val Leu Ser Phe Leu Glu Ile Trp Tyr Thr Thr 70 75 Thr Ile Pro Lys Met Leu Ser Ser Leu Val Ser Glu Lys Lys Thr Ile 90 Ser Leu Gly Gly Cys Leu Met Gln Met Tyr Phe Phe His Ser Leu Gly 105 Ile Thr Glu Gly Cys Ile Leu Thr Ala Met Ser Ile Asp Arg Tyr Ile 120 125 Ala Ile Cys Tyr Pro Leu Arg Tyr Pro Thr Ile Met Thr Ser Lys Leu 135 140 Cys Ile Gln Leu Thr Ala Gly Ser Cys Phe Cys Gly Phe Leu Leu Val 150 155 Leu Pro Glu Ile Ala Trp Ile Ala Thr Leu Pro Phe Cys Gly Ser Asn 170 165 Lys Ile His Gln Ile Phe Cys Asp Phe Thr Pro Val Leu Ser Leu Ala 185 Cys Thr Asp Thr Ser Leu Val Val Ile Val Asp Ala Ile His Ala Val 200 205 Glu Ile Leu Ala Ser Phe Leu Val Ile Ala Leu Ser Tyr Ile Arg Ile 215 Ile Met Val Ile Leu Gly Met Pro Ser Ala Glu Gly Arg His Lys Ala 230 235 Phe Ser Thr Cys Ala Ala His Leu Ala Val Phe Leu Leu Phe Phe Gly 245 250 Ser Val Ala Val Met Tyr Leu Arg Phe Ser Ala Thr Tyr Ser Val Phe 265 270 Trp Asp Thr Val Ile Ala Val Thr Phe Val Ile Leu Ala Pro Phe Leu

280 275 285 Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Glu Met Lys Asp Ala Ile 295 Gly Arg Leu Phe His Gln Lys Arg Asp Val Arg Ala Gln Lys 310 <210> 1716 <211> 299 <212> PRT <213> Mus musculus <400> 1716 Met Trp Asn Thr Ser Glu Ala Ala Phe Leu Ser Cys Ser Cys Trp Tyr - 5 10 Thr Cys Ser Pro Leu Val Val Ile Cys Ser Ser Ser Leu Val Ile Arg 25 Leu Asp Ala Ala Leu His Lys Pro Met Tyr His Phe Val Ser Val Leu Ser Phe Leu Glu Leu Trp Tyr Thr Ala Thr Thr Met Pro Lys Met Leu 55 Ala Asn Leu Leu Ser Glu Lys Lys Thr Ile Ser Phe Ala Gly Cys Leu 70 75 Leu Gln Thr Tyr Phe Phe His Ser Leu Gly Ala Ser Glu Cys Tyr Leu 90 8.5 Leu Thr Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Arg Pro Leu 105 His Tyr Pro Ser Ile Met Thr Thr Ala Leu Cys Val Lys Met Ala Ala 120 115 125 Gly Cys Trp Thr Cys Gly Phe Leu Cys Pro Ile Ser Glu Val Ile Leu 130 135 Val Ser Gln Leu Pro Phe Cys Asn Tyr Asn Glu Ile Pro His Ile Phe 150 155 Cys Asp Phe Pro Pro Leu Leu Ser Leu Ala Cys Lys Asp Thr Ser Thr 170 Asn Val Leu Val Asp Phe Ala Val Asn Ala Phe Ile Ile Leu Ile Thr 180 185 Phe Leu Phe Ile Met Ala Ser Tyr Gly Arg Ile Ile Gly Ala Val Leu 200 Lys Ile Lys Thr Ala Ala Gly Arg Arg Lys Ala Phe Ser Thr Cys Ala 215 220 Ser His Leu Ile Val Val Leu Ile Phe Phe Gly Ser Ile Ile Phe Met 230 235 Tyr Val Arg Leu Lys Lys Ser Tyr Ser Leu Thr Leu Asp Arg Thr Leu 250 245 Ala Val Val Tyr Ser Val Leu Thr Pro Leu Ala Asn Pro Ile Ile Tyr 265 Ser Leu Arg Asn Lys Glu Leu Ile Gln Ala Ile Lys Arg Thr Phe Phe 275 280 Lys Lys Val Glu Lys Ala Ser Pro Thr His His 295

<210> 1717 <211> 314

<212> PRT

<213> Mus musculus

```
<400> 1717
Met Asp His Val Asn Tyr Thr Trp Thr Arg Thr Phe Ile Leu Ala Gly
Phe Thr Thr Ser Gly Ala Leu Arg Pro Leu Ala Phe Leu Gly Thr Leu
Cys Ile Tyr Leu Leu Thr Leu Ala Gly Asn Leu Phe Ile Ile Val Leu
                            40
Val Gln Ala Asp Ser Gly Leu Ser Thr Pro Met Tyr Phe Phe Ile Ser
Val Leu Ser Phe Leu Glu Leu Trp Tyr Val Ser Thr Thr Val Pro Thr
Leu Leu His Thr Leu Leu His Gly His Ser Pro Ile Pro Ser Ser Ala
                                    90
Cys Phe Val Gln Leu Tyr Val Phe His Ser Leu Gly Met Thr Glu Cys
            100
                                105
Tyr Leu Leu Gly Val Met Ala Leu Asp Arg Tyr Leu Ala Ile Cys Arg
                            120
Pro Leu His Tyr His Ala Leu Met Ser Lys Gln Val Gln Leu Trp Leu
Ala Gly Ala Thr Trp Val Ala Gly Phe Ser Ala Ala Leu Val Pro Ala
                    150
                                        155
Cys Leu Thr Ala Ser Leu Pro Tyr Cys Leu Lys Glu Ile Ala His Tyr
                165
                                    170
Phe Cys Asp Leu Ala Pro Leu Met Arg Leu Ala Cys Val Ser Thr Arg
                                185
                                                    190
Trp His Ala Arg Val His Gly Ala Val Ile Gly Val Ala Thr Gly Cys
                            200
Asn Phe Val Leu Ile Leu Gly Leu Tyr Gly Gly Ile Leu Thr Ala Val
                        215
                                            220
Leu Lys Leu Pro Ser Ala Ala Ser Arg Ala Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ser His Met Thr Val Val Ala Leu Phe Tyr Ala Ser Ala Phe Thr
                                    250
Val Tyr Val Gly Ser Pro Gln Ser Arg Pro Glu Gly Thr Asp Lys Arg
                                265
Ile Ala Leu Val Tyr Ala Leu Leu Thr Pro Phe Leu Asn Pro Ile Ile
        275
                            280
                                                285
Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Val Lys Arg Val Ser
                        295
Glu Lys Ile Arg Thr Leu Leu Arg Asp Thr
305
                    310
<210> 1718
```

```
<210> 1718
<211> 312
<212> PRT
<213> Mus musculus
```

<400> 1718

Met Asp His Val Asn Tyr Thr Trp Thr Arg Thr Phe Ile Leu Ala Gly 1 5 10 15

Phe Thr Thr Ser Gly Thr Leu Gln His Leu Ala Val Phe Gly Thr Leu 25 30

Cys Ile Tyr Leu Leu Thr Leu Ala Gly Asn Leu Phe Ile Ile Val Leu 35 40 40 45

Val Gln Ala Asp Ser Gly Leu Ser Thr Pro Met Tyr Phe Phe Ile Ser

```
50
                       55
Val Leu Ser Phe Leu Glu Leu Trp Tyr Val Ser Thr Thr Val Pro Thr
                    70
                                        75
Leu Leu His Thr Leu Leu His Gly Pro Ser Pro Ile Pro Ser Ser Ala
                                    90
Cys Phe Val Gln Leu Tyr Val Phe His Ser Leu Gly Met Thr Glu Cys
                                105
Tyr Leu Leu Gly Val Met Ala Leu Asp Arg Tyr Leu Ala Ile Cys Arg
                           120
Pro Leu His Tyr His Ala Leu Met Ser Arg Gln Val Gln Lys Gln Leu
                       135
                                            140
Val Gly Val Thr Trp Leu Ala Gly Phe Ser Ala Ala Leu Val Pro Ala
                   150
                                        155
Gly Leu Thr Ala Ser Leu Pro Tyr Cys Leu Lys Glu Val Ala His Tyr
                                    170
               165
Phe Cys Asp Leu Ala Pro Val Met Gln Leu Ala Cys Val Asp Thr Ser
                                185
Trp His Ala Arg Leu Tyr Ile Ala Val Ile Gly Met Ile Asn Thr Cys
                            200
Asn Leu Thr Phe Ile Leu Gly Leu Tyr Gly Gly Ile Val Arg Ala Val
                        215
Leu Lys Leu Pro Ser Ala Ala Ser Arg Ala Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ser His Ile Thr Val Val Thr-Leu Phe Phe Gly Ser Ala Phe Ile
                                    250
Val Tyr Val Gly Pro Pro Glu Ile Arg Ala Glu Gly Arg Asp Lys Leu
            260
                                265
Ile Ala Leu Val Tyr Thr Leu Leu Thr Pro Phe Phe Asn Pro Ile Ile
                            280
                                                285
Tyr Thr Leu Arg Asn Lys Glu Val Lys Glu Ala Phe Lys Arg Val Thr
                       295
Gln Arg Ile Asn Ala Val Leu Lys
                    310
```

<211> 313

<212> PRT

<213> Mus musculus

<400> 1719

 Met
 Val
 Glu
 Ser
 Asn
 Val
 Thr
 Cys
 Trp
 Gln
 Gly
 Phe
 Val
 Phe
 Leu
 Gly
 Fln
 Leu
 Gly
 Gly
 Leu
 Gly
 Leu
 Leu
 Gly
 Leu
 Leu
 Leu
 Phe
 Val
 Leu
 Phe
 Phe
 Leu
 Phe
 Leu
 Phe
 Phe</th

120

```
Pro Leu His Tyr Ala Ser Arg Met Asn Pro Thr Val Cys Ala Gln Leu
                       135
Val Gly Thr Ser Phe Leu Ser Gly Tyr Leu Phe Gly Leu Gly Met Thr
                    150
                                        155
Leu Val Ile Phe Arg Leu Ser Phe Cys Ser Ser His Glu Ile Gln His
                165
                                    170
Phe Phe Cys Asp Thr Pro Pro Val Leu Ser Leu Thr Cys Gly Asp Thr
                                185
           180
Arg Leu Ser Glu Leu Gly Ile Leu Ile Leu Ser Leu Leu Val Leu Leu
                            200
                                                205
Val Ser Phe Phe Leu Ile Ser Val Ser Tyr Ala Tyr Ile Leu Val Ala
                       215
Ile Leu Arg Ile Pro Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                   230
                                        235
Cys Ala Ser His Leu Thr Val Val Ile His Tyr Gly Cys Ala Ser
               245
                                    250
Phe Met Tyr Leu Arg Pro Lys Ala Ser Tyr Ser Leu Glu Arg Asp Gln
            260
                                265
Leu Ile Ala Val Thr Tyr Thr Val Ala Thr Pro Leu Leu Asn Pro Ile
                            280
Val Tyr Ser Leu Arg Asn Arg Ala Val Gln Thr Ala Leu Arg Asn Ala
                       295
                                            300
Phe Arg Gly Ser Leu Leu Gly Lys Arg
```

<210> 1720 <211> 309 <212> PRT

<213> Mus musculus

<400> 1720

Met Ile Asn Gln Thr Ile Leu Gln Glu Phe Ile Leu Ile Gly Phe Ser 10 Ala Tyr Pro Leu Val Gln Thr Cys Leu Phe Val Val Phe Leu Cys Leu 20 25 Tyr Met Val Thr Leu Ala Ser Asn Leu Thr Ile Met Gly Leu Thr Trp 40 Ala Asp Arg Tyr Leu His Thr Pro Met Tyr Tyr Phe Leu Ser Ala Leu 55 Ser Phe Ser Glu Thr Cys Tyr Thr Leu Thr Ile Ile Pro Lys Met Leu 70 75 Val Asp Leu Leu Asp Lys Asp Asn Arg Ile Ser Asp Ile Gly Cys Gly 85 90 Leu Gln Met Cys Phe Phe Leu Gly Leu Gly Gly Thr Asn Cys Ile Leu 105 Leu Thr Val Met Gly Tyr Asp Arg Phe Leu Ala Ile Cys Asn Ala Leu 120 Lys Tyr Pro Leu Leu Met Thr Asn Val Ala Cys Gly Gln His Val Ala 135 140 Thr Ala Trp Val Gly Gly Phe Leu Ile Ser Leu Ile Glu Thr Thr Leu 150 155 Ile Phe Arg Val Ser Phe Cys Ile Pro Asn Leu Ile Arg His Phe Phe 165 170 Cys His Met Arg Ala Val Leu Arg Leu Ser Cys Thr Asp Ser Asn Phe 185 Thr Glu Phe Ile Val Thr Leu Met Ser Val Ser Gly Leu Leu Gly Thr

```
195
                           200
Phe Leu Leu Ile Leu Leu Thr Tyr Val Phe Ile Leu Ser Ser Val Leu
                       215
                                            220
Lys Ile Pro Ser Ala Glu Gly Lys Gln Lys Ala Phe Pro Pro Cys Ala
                   230
                                        235
Ser His Leu Thr Val Ala Ile Ile His Phe Val Phe Ala Pro Val Val
                                   250
               245
Tyr Leu Lys Pro Glu Asn Ser Gly Gly Asp Asp Thr Leu Ile Ala Val
                               265
Pro Tyr Thr Ile Ile Thr Pro Phe Leu Ser Pro Ile Ile Phe Thr Leu
                           280
                                               285
Arg Asn Lys Asp Ile Lys Asn Ala Phe Arg Glu Ile Met Arg Lys Thr
                       295
Val Val Leu Lys Lys
305
<210> 1721
<211> 315
<212> PRT
<213> Mus musculus
<400> 1721
Met Gln Thr Leu Arg Lys Asp Asn Cys Ser Ser Val Ser Glu Phe Leu
                                   10
Leu Leu Gly Phe Ser Ser Glu Ser Gln Val Arg Val Ala Leu Phe Ile
                               25
Phe Phe Leu Leu Tyr Met Ile Thr Leu Leu Gly Asn Gly Leu Ile
                           40
Ile Thr Leu Ile Tyr Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe
                       55
Phe Leu Ser Ile Leu Ser Leu Val Asp Met Ser Tyr Val Thr Thr
                   70
Val Pro Gln Met Leu Val Asn Met Val Cys Pro Arg Arg Thr Ile Ser
               85
                                    90
Trp Gly Ala Cys Val Ala Gln Met Phe Ile Phe Leu Leu Gly Ile
           100
                               105
Ala Glu Cys Val Leu Tyr Ala Ile Met Ala Tyr Asp Arg Tyr Val Ala
                           120
                                               125
Ile Cys Phe Pro Leu His Tyr Ser Val Leu Met Ser Arg Leu Val Cys
                       135
Ile Lys Met Val Thr Val Cys Trp Ser Ile Ser Ile Thr Gly Ala Leu
```

Ile Tyr Thr Val Phe Thr Met Arg Leu Pro Tyr Cys Gly Pro Tyr Lys

Ile Asn His Phe Phe Cys Glu Val Pro Ala Val Leu Lys Leu Ala Cys 180 185 190

Ala Asp Thr Ser Phe Asn Asp Arg Leu Asp Phe Ile Leu Gly Phe Ile 195 200 205

Phe Leu Leu Val Pro Leu Ser Leu Ile Leu Ala Ser Tyr Ala Cys Ile

Phe Ala Ser Ile Leu Arg Ile Arg Ser Ser Gln Gly Arg Leu Lys Ser

Phe Ser Thr Cys Ala Ser His Ile Thr Val Val Thr Met Phe Tyr Gly

Pro Ala Met Ile Met Tyr Met Arg Pro Gly Ser Trp Tyr Asp Pro Glu

265

155

235

170

250

150

230

245

260

215

 Arg Asp Lys Lys Leu Ala Leu Phe Tyr Asn Val Val Ser Ala Phe Leu

 275
 280
 285

 Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Phe
 290
 300

 Leu Lys Val Leu Gly Asp Arg Gly Ala Ala Lys
 310
 315

<210> 1722 <211> 304 <212> PRT <213> Mus musculus

<400> 1722

Met Gln Glu Leu Ser Gln Ile Thr Val Thr Glu Phe Ile Leu Leu Gly 10 Phe Thr Pro Asp Pro Arg Thr Asn Pro Leu Leu Phe Pro Phe Leu 20 25 Val Phe Tyr Leu Leu Ile Leu Leu Ser Asn Ser His Leu Leu Ala Ile 4.0 Ile His Gln Asp Ser Asp Leu His Thr Pro Pro Thr Tyr Phe Phe Ile 55 Gly Val Leu Ser Met Val Gly Val Cys Tyr Ala Thr Thr Val Ser Gln Thr Leu Ala His Ile Leu Ser Arg Lys Arg Ala Ile Ser Phe Thr 85 90 Arg Cys Val Ala His Ile Tyr Ile Phe Leu Leu Phe Gly Val Thr Glu 100 105 Ser Trp Leu Ser Ile Met Ser Val Asp Arg Tyr Ile Ala Ile Cys 120 125 His Pro Leu Arg Tyr Lys Val Ile Val Ser Gln Gly Met Cys Leu Leu 135 Met Val Gly Ile Cys Ala Thr Tyr Gly Val Val Gly Gly Leu Cys Cys 150 155 Thr Phe Phe Ala Met Arg Leu Pro Tyr Cys Gly Pro Ser Glu Ile Asp 170 165 His Tyr Phe Cys Glu Val Pro Ala Val Leu Lys Leu Ala Cys Ala Asp 185 Thr Ser Leu Ser Asp Phe Val Asp Phe Ile Ile Gly Phe Asn Val Ile 200 205 Val Val Pro Leu Ser Leu Ile Ala Ile Val Tyr Ala Asn Ile Phe Thr 215 220 Val Ile Met Lys Ile Arg Ser Thr Gln Arg Arg Thr Lys Asp Gln Gly 230 235 Glu Asp Leu Arg Leu Pro His His Cys Gly His His Val Cys His Leu 245 250 Met Gln His His Ala His Glu Ser Cys Leu Trp Leu Leu Ile Lys Gln 265 Arg Gln Glu Asn Gly Leu Phe Tyr Asn Ile Ala Thr Ala Phe Leu Asn 280 Pro Val Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Lys Arg Phe Leu 295

<210> 1723

<211> 313

<212> PRT

<400> 1723

```
Val Thr Arg Gln Arg Glu Gln Glu Tyr Phe Phe Ile Leu Phe Leu
                                25
Phe Ile Tyr Pro Ile Thr Val Phe Gly Asn Met Leu Ile Ile Leu Ala
                           40
Ile His Ser Asp Thr Arg Leu His Asn Pro Met Tyr Phe Phe Leu Ala
                       55
                                            60
Asn Leu Ser Leu Val Asp Ile Phe Phe Ser Ser Val Thr Ile Pro Lys
                                        75
Met Leu Ala Asn His Leu Leu Gly Ser Lys Ala Ile Ser Phe Gly Gly
               85
                                    90
Cys Met Ala Gln Met Tyr Phe Met Ile Gly Leu Gly Asn Thr Asp Ser
                               105
Tyr Ile Leu Ala Ala Met Ala Tyr Asp Arg Ala Val Ala Ile Ser Arg
                            120
Pro Leu His Tyr Ala Thr Ile Met Ser Pro Gln Leu Cys Val Leu Leu
                        135
Val Ala Gly Ser Trp Val Ile Ala Asn Ala Asn Ala Leu Pro His Thr
                  150
                                       155
Leu Leu Thr Ala Arg Leu Ser Phe Cys Gly Asn Lys Asp Val Ala Asn
               165
                                   170
Phe Tyr Cys Asp Ile Thr Pro Leu Gln Leu Ser Cys Ser Asp Ile
           180
                               185
Arg Phe Asn Val Lys Met Met Tyr Leu Gly Val Gly Val Phe Ser Val
                           200
                                                205
Pro Leu Leu Cys Ile Ile Ile Ser Tyr Val Arg Val Phe Ser Thr Val
                       215
                                            220
Leu Arg Val Pro Ser Thr Lys Gly Phe Leu Lys Ala Leu Ser Thr Cys
                    230
                                        235
Gly Ser His Leu Thr Val Val Ser Leu Tyr Tyr Gly Thr Val Met Gly
                245
                                    250
Met Tyr Phe Arg Pro Leu Thr Ser Tyr Ser Leu Lys His Ala Leu Ile
           260
                               265
Thr Val Met Tyr Thr Ala Val Thr Pro Met Leu Asn Pro Phe Ile Tyr
                           280
                                               285
Ser Leu Arg Asn Arg Asp Met Lys Ala Ala Leu Lys Lys Leu Phe His
                       295
                                            300
Cys Pro Ser Ser Ser Ser Leu Met
                    310
<210> 1724
<211> 314
<212> PRT
<213> Mus musculus
<400> 1724
Met Ala Val Thr Asn Leu Thr Tyr Lys Pro Gln Phe Gln Leu Leu Gly
                                   10
Leu Met Asp Gly Thr Asp Pro His Pro Leu Leu Phe Leu Leu Phe Leu
                                25
Ser Ile Tyr Leu Leu Asn Ala Leu Gly Asn Leu Ser Met Val Val Leu
                            40
```

Met Arg Glu Glu Asn Glu Ser Ser Thr Ile Asp Phe Thr Leu Leu Gly

```
Val Arg Ser Asp Gly Ala Leu Cys Ser Pro Met Tyr Tyr Phe Leu Gly
                       55
His Leu Ser Leu Val Asp Val Cys Phe Thr Thr Val Thr Val Pro Arq
                                        75
Leu Leu Ala Thr Leu Leu His Pro Gly Gln Ala Ile Ser Phe Gln Ala
                                    90
Cys Phe Ala Gln Met Tyr Phe Phe Val Ala Leu Gly Ile Thr Glu Ser
                               105
Tyr Leu Leu Ala Ala Met Ser Tyr Asp Arg Ala Val Ala Val Cys Arg
                        120
Pro Leu His Tyr Gly Ala Val Met Thr Pro Trp Arg Cys Phe Leu Leu
                       135
                                          140
Val Ala Ala Ser Trp Ala Val Ala His Leu His Ser Leu Leu His Thr
                  150
                                       155
Leu Leu Ile Ser Ala Leu Thr Tyr Pro Pro Ser Ala Pro Val Arg His
               165
                                   170
Phe Phe Cys Asp Met Thr Val Met Leu Ser Leu Ala Thr Ser Asp Thr
           180
                               185
Ser Ala Ala Glu Thr Ala Ile Phe Ser Glu Gly Leu Thr Val Val Leu
                            200
Thr Pro Leu Leu Val Ser Leu Ser Tyr Ala Arg Ile Leu Val Ala
                       215
                                           220
Val Leu Gly Ile Arg Thr Thr Gly Gly Arg His Arg Val Phe Ser Thr
                  230
                                       235
Cys Gly Ala His Leu Val Val Val Ser Leu Phe Phe Gly Ser Val Leu
               245
                                   250
Ser Val Tyr Phe Arg Pro Ser Ser Ala Tyr Ser Ala Arg Tyr Asp Arg
                               265
Met Ala Ser Val Val Tyr Ala Val Val Thr Pro Thr Leu Asn Pro Phe
       275
                           280
                                              285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Leu Lys Arg Gly
                       295
Phe Arg Trp Arg Ala Ala Pro Gln Asp Glu
                   310
```

```
<210> 1725
```

<400> 1725

Met 1	Glu	Ser	Lys	Phe 5	Glu	Ser	Asn	Gly	Thr 10	Ala	Val	Thr	Glu	Phe 15	Ile
Leu	Leu	Gly	Leu 20	Val	Glu	Thr	Ala	_	Leu		Pro	Val	Ile 30	Phe	Val
Val	Phe	Leu 35	Phe	Ala	Tyr	Leu	Leu 40	Thr	Val	Gly	Gly	Asn 45	Leu	Ser	Ile
Leu	Ala 50	Ala	Val	Phe	Val	Glu 55	Pro	Lys	Leu	His	Thr 60	Pro	Met	Tyr	Phe
Phe 65	Leu	Gly	Asn	Leu	Ser 70	Met	Leu	Asp	Val	Gly 75	Cys	Ile	Ser	Val	Thr 80
Val	Pro	Ser	Met	Leu 85	Gly	Arg	Leu	Leu	Ser 90	His	Lys	Arg	Thr	Val 95	Pro
Tyr	Gly	Ala	Cys 100	Leu	Thr	Gln	Leu	Phe 105	Phe	Phe	His	Gln	Leu 110	Ala	Gly
Val	Asp	Cys	Phe	Leu	Leu	Thr	Ala	Met	Ala	Tyr	Asp	Arg	Phe	Leu	Ala

<211> 311

<212> PRT

<213> Mus musculus

```
115
                           120
Ile Cys Arg Pro Leu Thr Tyr Ser Thr Arg Met Asn His Thr Val Gln
                       135
Arg Ile Leu Val Ala Thr Ser Trp Ala Cys Ala Phe Ser Asn Ala Leu
                   150
                                        155
Thr His Thr Val Ala Ile Ser Thr Leu Asn Phe Cys Gly Pro Asn Val
               165
                                    170
Ile Asn His Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys
                               185
Ser Ser Thr Gln Leu Asn Glu Leu Leu Leu Phe Gly Leu Gly Val Leu
                           200
                                                205
Met Ala Gly Ala Pro Val Ile Leu Ile Val Thr Ser Tyr Ile His Val
                       215
Ala Ala Val Leu Arg Ile Gln Ser Ser Glu Gly Arg Lys Lys Ala
                   230
                                        235
Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Gly Ile Phe Tyr Gly
                245
                                    250
Thr Gly Val Phe Ser Tyr Met Arg Leu Gly Ser Val Glu Ala Ser Asp
                                265
Lys Asp Lys Gly Ile Gly Ile Leu Asn Thr Val Ile Ser Pro Met Leu
       275
                           280
                                                285
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Pro Asp Val Gln Gly Ala Leu
                       295
Arg Arg Val Leu Thr Gly Lys
```

<210> 1726 <211> 315

<212> PRT

<213> Mus musculus

<400> 1726

Met Gln Thr Lys Pro Arg Ile Asn Gly Thr Thr Ile Thr Glu Phe Ile Leu Leu Gly Leu Val Glu Thr Pro Glu Leu Trp Pro Leu Val Phe Ile 25 Leu Phe Leu Leu Ala Tyr Met Thr Thr Val Gly Gly Asn Leu Ser Ile 40 Leu Ala Ala Val Leu Val Glu Pro Lys Leu His Thr Pro Met Tyr Phe 55 Phe Leu Gly Asn Leu Ser Val Met Asp Val Gly Cys Ile Ser Val Thr 70 75 Ile Pro Ser Met Leu Val Arg Leu Leu Val Gln Lys His Thr Ile Pro 90 Tyr Gly Asp Cys Leu Thr Gln Leu Phe Phe Phe His Leu Leu Ala Gly 100 105 Val Asp Cys Phe Leu Leu Thr Ala Met Ala Tyr Asp Arg Phe Leu Ala 115 120 Ile Cys Gln Pro Leu Thr Tyr Ser Thr Arg Met Asn Tyr Thr Ile Gln 135 140 Arg Ile Leu Val Ala Met Ser Trp Ala Cys Ala Phe Ser Asn Ala Leu 150 155 Thr His Thr Val Ala Ile Ser Thr Leu His Phe Cys Gly Pro Asn Val 170 Ile Asn His Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys 180 185 190

Ser Ser Thr Gln Leu Asn Glu Leu Leu Leu Phe Gly Val Gly Phe Ile 200 Met Ala Gly Thr Pro Met Ala Leu Ile Phe Ile Ser Tyr Ile His Val 215 220 Ala Ala Val Leu Arg Ile Arg Ser Ala Glu Gly Arg Lys Ala 230 235 Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Ala Met Phe Tyr Gly 245 250 Thr Gly Met Phe Asn Tyr Met Arg Leu Gly Ser Thr Lys Phe Ser Asp 265 Lys Asp Lys Ala Ile Gly Ile Phe Asn Thr Val Ile Asn Pro Met Leu 280 Asn Pro Leu Ile Tyr Ser Leu Arg Asn Pro Asp Val Gln Ala Ala Leu 300 295 Trp Arg Val Leu Thr Gly Arg Arg Pro Ala Ala 310

<210> 1727 <211> 315 <212> PRT <213> Mus musculus

<400> 1727

Met Gln Pro Lys Pro Arg Ala Asn Gly Thr Thr Ile Thr Glu Phe Ile 10 Leu Leu Gly Leu Val Glu Thr Pro Glu Leu Trp Pro Leu Val Phe Ile 25 Leu Phe Leu Leu Ala Tyr Met Thr Thr Val Gly Gly Asn Leu Ser Ile 40 Leu Ala Ala Val Leu Val Glu Pro Lys Leu His Thr Pro Met Tyr Phe 55 Phe Leu Gly Asn Leu Ser Val Met Asp Val Gly Cys Ile Ser Val Thr Ile Pro Ser Met Leu Val Arg Leu Leu Val His Lys Arg Thr Ile Pro 85 90 Tyr Gly Asp Cys Leu Thr Gln Leu Phe Phe His Leu Leu Val Gly 105 Val Asp Cys Phe Leu Leu Thr Ala Met Ala Tyr Asp Arg Phe Leu Ala 120 Ile Cys Arg Pro Leu Thr Tyr Ser Thr Arg Met Asn His Thr Ile Gln 135 140 Arg Ile Leu Val Ala Thr Ser Trp Ala Cys Ala Phe Ser Asn Ala Leu 150 155 Thr His Thr Val Ala Ile Ser Thr Leu His Phe Cys Gly Pro Asn Val 165 170 Ile Asn His Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys 185 Ser Ser Thr Gln Leu Asn Glu Leu Leu Phe Gly Val Gly Phe Ile 200 Met Ala Gly Thr Pro Met Ala Leu Ile Phe Thr Ser Tyr Met His Val 215 220 Ala Ala Val Leu Arg Ile Arg Ser Ala Glu Gly Arg Lys Ala 230 235 Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Ala Ile Phe Tyr Gly 245 250 Ala Gly Ile Phe Asn Tyr Met Arg Leu Gly Ser Thr Lys Leu Ser Asp

Lys Asp Lys Ala Ile Gly Ile Phe Asn Thr Val Ile Asn Pro Met Leu 275

Asn Pro Leu Ile Tyr Ser Leu Arg Asn Pro Asp Val Gln Ala Ala Leu 290

Trp Arg Val Leu Thr Gly Arg Arg Pro Ala Ala 305

<210> 1728 <211> 315 <212> PRT <213> Mus musculus

<400> 1728

Met Gln Pro Lys Pro Arg Ala Asn Gly Thr Thr Val Thr Glu Phe Ile Leu Leu Gly Leu Val Glu Thr Pro Glu Leu Trp Pro Leu Val Phe Ile 25 Leu Phe Leu Leu Ala Tyr Met Thr Thr Val Gly Gly Asn Leu Ser Ile Leu Ala Ala Val Leu Val Glu Pro Lys Leu His Thr His Met Tyr Phe 55 Phe Leu Gly Asn Leu Ser Val Met Asp Val Gly Cys Ile Ser Val Thr 70 7.5 Ile Pro Ser Met Leu Gly Arg Leu Leu Ala His Arg Leu Thr Val Pro 85 90 Tyr Gly Ala Cys Leu Thr Gln Leu Phe Phe His Leu Leu Ala Gly 100 105 110 Val Asp Cys Phe Leu Leu Thr Ala Met Ala Tyr Asp Arg Phe Leu Ala 120 Ile Cys Gln Pro Leu Thr Tyr Ser Thr Arg Met Asn His Ser Val Gln 135 130 140 Arg Ile Leu Val Ala Ser Ser Trp Ala Cys Ser Phe Ser Asn Ala Leu 150 155 Thr His Thr Val Ala Thr Ser Thr Leu Arg Phe Cys Gly Pro Asn Val 165 170 Ile Asp Asn Phe Tyr Cys Asp Leu Pro Gln Leu Phe Gln Leu Ser Cys 185 Ser Ser Thr Gln Ile Asn Glu Leu Leu Leu Phe Ala Leu Ser Phe Ile 195 200 205 Met Ala Gly Thr Pro Met Ala Leu Ile Phe Thr Ser Tyr Ile Asn Val 215 220 Ala Ala Val Leu Arg Ile Arg Ser Ala Glu Gly Arg Lys Lys Ala 230 235 Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Ala Met Phe Tyr Gly 245 250 Thr Gly Met Phe Asn Tyr Met Arg Leu Gly Ser Thr Lys Leu Ser Asp 265 Lys Asp Lys Ala Ile Gly Ile Phe Asn Thr Val Ile Asn Pro Met Leu 280 Asn Pro Leu Ile Tyr Ser Leu Arg Asn Pro Asp Val Gln Ala Ala Leu 295 Trp Arg Val Leu Thr Gly Arg Arg Pro Ala Ala 310

```
<211> 310
<212> PRT
<213> Mus musculus
<400> 1729
Met Glu Asn Cys Thr Lys Val Arg Glu Phe Ile Leu Leu Gly Leu Thr
                                   10
Asp Asp Pro Gly Leu Gln Val Ser Leu Cys Ile Met Phe Thr Leu Ile
                               25
Tyr Leu Ile Asp Val Val Gly Asn Thr Gly Leu Ile Met Leu Val Leu
                           40
Met Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Cys Asn Leu
                        55
                                            60
Ser Phe Val Asp Leu Gly Tyr Ser Ser Ala Val Thr Pro Met Val Ile
                   70
                                       75
Ser Glu Phe Phe Ile Val Ser Lys Val Val Ser Tyr Asn Ala Cys Ala
                                    90
               85
Ala Gln Met Phe Phe Val Gly Phe Ala Thr Gly Glu Asn Tyr Leu
                                105
Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Lys Pro Leu
                                               125
                           120
His Tyr Ser Thr Arg Met Thr Thr Ser Val Cys Ile Cys Leu Asn Ile
                       135
Val Ser Tyr Ile Cys Gly Phe Leu Asn Ala Ile Phe His Val Gly Asp
                   150
                                       155
Ile Phe Ser Leu Ser Phe Cys Lys Ser Asn Val Val His His Phe Phe
               165
                                   170
Cys Asp Val Pro Ala Val Leu Ala Leu Ser Cys Ser Asp Ile His Leu
                               185
           180
Ser Glu Val Ile Leu Val Phe Leu Ser Thr Phe Asn Val Phe Phe Ala
                            200
Leu Leu Ile Ile Ser Val Ser Tyr Leu Phe Ile Phe Ile Thr Val Leu
                        215
Lys Met Lys Ser Asp Gln Gly His Gln Lys Ala Leu Ser Thr Cys Ala
                    230
                                        235
Ser His Leu Thr Val Val Ser Ile Phe Tyr Ser Thr Val Ile Phe Met
               245
                                   250
Tyr Leu Gln Pro Ser Ser Ser His Ser Met Asp Ala Asp Lys Val Ala
                               265
Ser Met Phe Tyr Thr Met Ile Ile Pro Thr Leu Asn Pro Leu Val Tyr
                           280
Ser Leu Arg Asn Lys Glu Val Asn Asn Ala Phe Lys Lys Val Val Glu
                      295
Arg Ala Lys Ile Phe Met
305
<210> 1730
<211> 308
<212> PRT
<213> Mus musculus
<400> 1730
Met Thr Ile Met Lys Asn Arg Thr Glu Val Thr Glu Phe Ile Leu Leu
                                   10
```

Gly Leu Thr Asn Asp Pro Gly Met Gln Leu Pro Leu Phe Ile Thr Phe

<210> 1729

```
Leu Ile Val Leu Asp Ser Arg Leu His Thr Pro Met Tyr Ile Phe Leu
Gly Asn Leu Ser Leu Val Asp Phe Cys Tyr Ser Ser Ala Val Thr Pro
Thr Val Met Thr Glu Leu Leu Ile Gly Lys Lys Val Ile Ser Tyr Asn
               85
                                    90
Asp Cys Ala Ala Gln Met Phe Phe Phe Gly Ala Phe Ala Thr Val Glu
                               105
Asn Tyr Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys
                           120
                                                125
Lys Pro Leu His Tyr Ala Thr Ile Met Thr Lys Ser Val Tyr Thr Arg
                       135
                                           140
Ile Ile Thr Ala Ser Tyr Gly Ile Ser Phe Met Ser Ala Ser Ile His
                   150
                                        155
Ile Ala Asp Ile Phe Thr Leu Ser Phe Cys Lys Ser Asn Val Ile His
                165
                                    170
His Phe Phe Cys Asp Val Pro Ala Ile Met Ala Leu Thr Cys Phe Asp
            180
                                185
Asn Gln Val Arg Glu Leu Val Leu Leu Tyr Ile Glu Ser Leu Asp Val
                            200
                                                205
Phe Phe Ala Leu Ile Val Ile Cys Thr Ser Tyr Met Leu Ile Phe Val
                       215
                                            220
Thr Ile Leu Lys Met His Ser Ala Ser Gly His His Lys Ala Ile Ser
                    230
                                        235
Thr Cys Ala Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Val
                                    250
               245
Ile Phe Met Tyr Leu Gln Pro Ser Ser Asn His Ser Met Asp Ile Asp
           260
                               265
Lys Val Thr Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro
                            280
Leu Val Tyr Ser Met Arg Asn Lys Glu Val Lys Asn Ala Phe Ile Lys
   290
                        295
Leu Ile Leu His
305
<210> 1731
<211> 309
<212> PRT
<213> Mus musculus
<400> 1731
Met Thr Ile Met Lys Asn Arg Thr Glu Val Thr Glu Phe Ile Leu Leu
                                    10
Gly Leu Thr Asn Asp Pro Gly Leu Gln Leu Pro Leu Phe Ile Thr Phe
Leu Leu Ile Tyr Thr Ile Thr Val Val Gly Asn Leu Gly Met Ile Leu
Leu Ile Val Leu Asp Ser Arg Leu His Thr Pro Met Tyr Ile Phe Leu
                       55
Gly Asn Leu Ser Leu Val Asp Phe Cys Tyr Ser Thr Ala Val Thr Pro
                   70
                                        7.5
Thr Val Met Asn Gly Leu Leu Ile Gly Asn Lys Val Ile Ser Tyr Asn
```

25 Leu Leu Ile Tyr Thr Ile Thr Val Val Gly Asn Leu Gly Met Ile Leu

20

```
Asp Cys Ala Ala Gln Met Phe Phe Phe Gly Ala Phe Ala Thr Val Glu
           100
                                105
Asn Tyr Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys
                            120
Lys Pro Leu His Tyr Ala Thr Ile Met Thr Lys Ser Met Tyr Thr Trp
                        135
Leu Ile Thr Gly Ser Tyr Val Ile Ser Phe Thr Asn Ser Ser Ile His
                   150
                                       155
Ile Ala Asp Ile Phe Thr Leu Ser Phe Cys Lys Ser Asn Val Ile His
               165
                                   170
His Phe Phe Cys Asp Val Pro Ala Ile Met Ala Leu Thr Cys Phe Asp
           180
                                185
Asn Gln Val Arg Glu His Val Leu Leu Tyr Ile Glu Ser Leu Asn Val
       195
                            200
                                                205
Phe Phe Ala Leu Ile Val Ile Cys Thr Ser Tyr Met Leu Ile Phe Val
                        215
                                            220
Thr Ile Leu Lys Met His Ser Ala Ser Gly His His Lys Ala Ile Ser
                    230
                                        235
Thr Cys Ala Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Val
                                    250
Ile Phe Met Tyr Leu Gln Pro Ser Ser Asn His Ser Met Asp Thr Asp
                                265
Lys Val Thr Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro
                           280
Leu Val Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Phe Ile Lys
                        295
Leu Ile Leu His Tyr
305
```

<211> 319

<212> PRT

<213> Mus musculus

<400> 1732

Met Thr Ser Met Glu Asn Ile Thr Glu Val Thr Glu Phe Ile Leu Leu 5. 10 Gly Leu Thr Asp Asp Pro Asn Leu Gln Val Pro Leu Leu Ile Phe 25 Leu Phe Ile Tyr Leu Val Thr Leu Ile Gly Asn Gly Gly Met Met Val 40 Ile Ile Phe Ser Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu 55 60 Ser Asn Leu Ser Phe Val Asp Leu Gly Tyr Ser Ser Ala Val Ala Pro 70 75 Lys Met Val Ala Ala Leu Gln Ser Gly Asn Lys Val Ile Ser Tyr Asn 8.5 90 Gly Cys Ala Ala Gln Phe Phe Phe Val Gly Phe Ala Thr Val Glu 100 105 Cys Tyr Leu Leu Ala Ser Met Ala Tyr Asp Arg His Ala Ala Val Cys 115 120 125 Arg Pro Leu His Tyr Thr Thr Met Thr Thr Gly Val Cys Thr Ile 135 140 Leu Thr Ile Gly Ser Tyr Thr Cys Gly Phe Leu Asn Ala Ser Ile His 150 155 Ala Ala Asp Thr Phe Lys Leu Ser Phe Cys Gly Ser Asn Lys Ile Asn

```
165
                                   170
His Phe Phe Cys Asp Ile Pro Pro Leu Leu Ala Leu Ala Cys Ser Ser
           180
                              185
                                        . 190
Thr His Ile Ser Lys Leu Val Val Phe Phe Val Val Gly Phe Asn Val
                           200
Phe Phe Thr Leu Leu Val Ile Ile Ile Ser Tyr Phe Phe Ile Tyr Ile
                       215
Ala Ile Gln Asn Met Lys Ser Ser Glu Gly Arg Lys Lys Ala Phe Ser
                   230
                                       235
Thr Cys Ala Ser His Leu Thr Ala Val Ser Ile Phe Tyr Gly Thr Ile
               245
                                   250
Ile Phe Met Tyr Leu Gln Pro Ser Ser Gly Gln Ser Met Asp Thr Asp
           260
                               265
Lys Ile Ala Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro
       275
                           280
                                               285
Leu Ile Tyr Ser Leu Arg Asn Arg Glu Val Lys Ser Ala Leu Trp Lys
                       295
Ile Leu Asn Arg Phe Tyr Pro Ala Ser Phe Ser Val Ser Arg Lys
                   310
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1733

Met Glu Asn Ser Thr Glu Val Thr Glu Phe Ile Leu Ala Gly Leu Thr 10 Asp Asp Pro Lys Leu Gln Ile Pro Leu Phe Ile Val Phe Leu Leu Ile 20 25 Tyr Leu Ser Thr Val Leu Gly Asn Leu Gly Met Val Gly Leu Ile Leu 45 Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser His Leu Ser Leu Val Asp Phe Gly Tyr Ser Ser Ala Val Thr Pro Lys Val Met 75 Ser Gly Leu Leu Ser Ile Asp Lys Thr Ile Ser His Asn Thr Cys Gly 85 90 Thr Gln Phe Phe Phe Val Gly Phe Ile Thr Thr Glu Ser Phe Leu 105 100 Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu 120 His Tyr Thr Thr Met Thr Thr Asn Thr Cys Ala Cys Leu Thr Ile 135 140 Gly Ser Tyr Val Cys Gly Phe Leu Asn Ser Ser Ile His Thr Gly Asn 150 155 Ile Phe Arg Leu Ser Phe Cys Lys Phe Asn Val Ile Asp His Phe Phe 170 Cys Asp Ala Pro Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr Tyr Ile 185 180 Ser Glu Thr Val Ile Phe Phe Val Val Gly Phe Asn Ala Leu Phe Ser 200 Ile Val Val Ile Thr Ile Ser Tyr Leu Leu Ile Phe Ile Thr Ile Leu 215 220 Arg Met Arg Ser Ser Glu Gly Arg His Lys Ala Phe Ser Thr Cys Ala 230 235

 Ser His Leu
 Thr Ala Val Ser Ile
 Phe Tyr Gly
 Thr Val Ile
 Phe Met 255

 Tyr Leu
 Gln Pro Ser Ser Ser His 265
 Thr Met Gly Thr Asp Lys Met 270
 Lys Met Ala 260

 Ser Val Phe 757
 Thr Met Val Ile Pro Met Leu Asn Pro Leu Val Tyr 285

 Ser Leu Arg Asn Lys Gly 295
 Val Lys Gly Ala Phe Lys Lys Ala Val Gly 295

 Asn Ala Lys Ser Ala Leu Thr Phe Leu Phe 305

<210> 1734 <211> 307 <212> PRT <213> Mus musculus

<400> 1734

Met Glu Asn Arg Thr Glu Val Arg Cys Phe Ile Leu Val Gly Leu Thr Asn Asp Pro Ser Leu Gln Leu Pro Leu Ser Ile Thr Phe Leu Leu Ile 25 Tyr Ile Ile Thr Leu Ile Gly Asn Leu Gly Leu Ile Leu Met Ile Leu 40 Leu Asp Ser Arg Leu His Thr Pro Met Tyr Ile Phe Leu Gly Asn Leu 55 Ser Leu Val Asp Phe Cys Tyr Ser Ser Thr Val Thr Pro Lys Val Ile 75 Ala Gly Phe Leu Thr Gly Asp Lys Ile Met Ser Tyr Asn Ala Cys Ala 85 90 95 Ser Gln Met Phe Phe Phe Ala Asn Phe Gly Asp Val Glu Asn Tyr Leu 105 Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Lys Pro Leu 120 125 His Tyr Ala Thr Thr Met Thr Thr His Met Cys Ala Ser Leu Val Ile 135 140 130 Gly Cys Tyr Ile Cys Gly Phe Leu Ser Ala Ser Ile Tyr Thr Met Asp 150 155 Ala Leu Ser Leu Ser Phe Cys Glu Ser Asn Val Ile His His Phe Phe 165 170 Cys Asp Val Leu Ala Val Met Ile Val Ser Cys Ser Asp Ser His Val 185 190 Asn Glu Leu Ile Leu Ile Tyr Val Val Ser Phe Asn Met Phe Phe Ala 200 205 Leu Ile Ile Ile Leu Ile Ser Tyr Met Phe Ile Phe Thr Asn Ile Leu 215 220 Lys Ile His Ser Ser Ala Gly Tyr His Lys Ala Val Ser Thr Cys Ala 230 235 Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Ile Ile Phe Met 245 250 Tyr Leu Gln Pro Ser Ser Ser His Thr Met Asp Thr Asp Lys Ile Ala 265 Ser Val Phe Tyr Thr Met Val Ile Cys Met Leu Asn Pro Leu Val Tyr 280 285 Ser Leu Arg Ser Lys Asp Val Lys Ser Ala Phe Thr Lys Ile Val Leu 290 295 Arg Ser Lys

<400> 1736

```
<210> 1735
<211> 314
<212> PRT
<213> Mus musculus
<400> 1735
Met Glu Asn Ser Thr Glu Val Thr Glu Phe Ile Leu Thr Gly Leu Thr
                                    10
Asp Asn Pro Glu Leu Gln Ile Pro Leu Phe Ile Val Phe Leu Leu Ile
            20
                                25
Tyr Leu Ser Thr Val Leu Gly Asn Leu Gly Met Val Gly Leu Ile Leu
                            40
                                                45
Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser His Leu
                        55
Ser Leu Val Asp Phe Gly Tyr Ser Ser Ala Val Thr Pro Lys Val Met
                    70
                                        75
Pro Gly Leu Leu Ser Ile Asp Lys Thr Ile Thr His Asn Ala Cys Gly
                                    90
Thr Gln Phe Phe Phe Val Ser Phe Ile Thr Thr Glu Ser Phe Leu
            100
                                105
Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu
                            120
Gln Tyr Thr Thr Met Thr Thr Asn Thr Cys Ala Cys Leu Thr Ile
                        135
                                            140
Gly Ser Tyr Val Cys Gly Val Leu Asn Ser Ser Ile His Thr Gly Asn
                   150
                                        155
Ile Phe Arg Leu Ser Phe Cys Lys Phe Asn Val Ile Asp His Phe Phe
               165
                                    170
Cys Asp Ala Pro Pro Leu Leu Ala Leu Ser Cys Ser Asp Thr Ser Val
                                185
Ser Glu Met Val Ile Leu Phe Val Val Gly Phe Asn Asp Ile Phe Ser
                            200
Ile Val Val Ile Pro Ile Ser Tyr Leu Phe Ile Phe Ile Thr Ile Leu
                        215
                                            220
Arg Met Arg Ser Ser Glu Gly Arg Gln Lys Ala Phe Ser Thr Cys Ala
                    230
                                        235
Ser His Leu Thr Val Val Phe Ile Phe Tyr Gly Ser Gly Ile Phe Met
                245
                                    250
Tyr Leu Gln Pro Ser Ser Ser His Thr Met Gly Thr Asp Lys Met Ala
                                265
Ser Val Phe Tyr Thr Met Ile Ile Pro Met Leu Asn Pro Leu Val Tyr
                           280
                                               285
Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Phe Lys Lys Ala Val Glu
                       295
Lys Ala Lys Ile Ser Leu Ala Phe Thr Phe
                    310
<210> 1736
<211> 312
<212> PRT
<213> Mus musculus
```

```
Met Glu Asn Arg Thr Glu Val Thr Glu Phe Ile Leu Leu Gly Val Thr
                                    10
Asn Ala Pro Ala Leu Gln Thr Pro Leu Phe Ile Leu Phe Thr Leu Ile
                                25
Tyr Phe Ile Asn Met Thr Gly Asn Leu Gly Met Leu Val Leu Ile Leu
Trp Asp Ser Arg Leu His Thr Pro Met Tyr Ile Phe Leu Gly Asn Leu
                        55
Ser Leu Val Asp Ile Phe Tyr Ser Ser Ala Val Thr Pro Thr Val Val
                                        75
Ala Gly Leu Leu Val Gly Asn Gln Ala Ile Ser Tyr Asn Ala Cys Ala
               85
                                    90
Ala Gln Met Phe Leu Phe Val Val Phe Ala Thr Ala Glu Asn Phe Leu
            100
                                105
Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu
                            120
                                                125
His Tyr Thr Thr Met Thr Pro Thr Thr Cys Ala Cys Leu Thr Met
                        135
                                            140
Ala Cys Tyr Ala Gly Gly Phe Leu Asn Ser Ser Ile His Thr Gly Asp
                    150
                                        155
Thr Phe Arg Leu Tyr Phe Cys Lys Ser Asn Val Val His His Phe Phe
                                    170
                165
Cys Asp Val Pro Ala Val Met Val Leu Ser Cys Ser Asp Arg His Ile
                               185
Ser Glu Met Val Leu Leu Tyr Gly Ala Ser Phe Val Ile Cys Ser Ala
       195
                            200
                                                205
Leu Leu Val Ile Leu Ile Ser Tyr Ile Phe Ile Phe Ile Thr Ile Phe
                        215
                                            220
Lys Met Arg Ser Ala Ala Gly Tyr Gln Lys Ala Met Ser Thr Cys Val
                   230
                                        235
Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Leu Ile Phe Met
                                    250
Tyr Leu Gln Pro Ser Ser Ser His Ser Met Asp Thr Asp Lys Ile Val
            260
                                265
Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Val Val Tyr
                            280
Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Phe Lys Lys Val Val Glu
                       295
                                            300
Lys Ala Lys Tyr Thr Leu Gly Phe
                    310
```

```
<210> 1737
```

<400> 1737

 Met Glu Asn Arg Thr Glu Met Thr Gly Phe Ile Leu Leu Gly Leu Thr 1
 5
 10
 15

 Asn Ala Pro Glu Leu Arg Ala Pro Leu Phe Ile Ile Ile Ser Phe Ile 20
 25
 30

 Tyr Phe Thr Asn Val Ile Gly Asn Leu Gly Met Ile Val Leu Ile Leu 35
 40
 45

 Trp Asp Ser Arg Leu His Thr Pro Met Tyr Cys Phe Leu Ala Asn Leu 50
 55
 60

 Ser Leu Val Asp Ile Phe Tyr Ser Ser Ala Val Ala Pro Thr Ile Leu

<211> 312

<212> PRT

<213> Mus musculus

```
70
                                        75
65
Ala Gly Leu Leu Val Gly Asn Ile Val Val Ser Tyr Asn Ala Cys Val
                                    90
Ala Gln Met Ile Ser Phe Ser Ala Phe Val Thr Thr Glu Asp Leu Leu
            100
                                105
Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu
                            120
His Tyr Thr Thr Ile Met Thr Pro Thr Val Cys Ile Cys Leu Ile Met
                       135
                                           140
Ala Cys Tyr Ala Gly Gly Phe Leu Asn Ser Ser Ile His Thr Gly Asp
                                        155
                   150
Thr Phe Arg Leu Ser Phe Cys Gly Ser Asn Ala Val His His Phe Phe
                                    170
               165
Cys Asp Val Pro Ala Val Met Thr Leu Ser Cys Ser Asp Arg His Val
           180
                               185
Ser Glu Ile Val Leu Ile Tyr Gly Ala Gly Phe Ile Ile Cys Ser Ala
Leu Leu Val Ile Leu Ile Ser Tyr Thr Phe Ile Phe Ile Thr Ile Phe
                        215
Arg Met Arg Ser Ala Ala Gly Tyr Gln Lys Ala Met Ser Thr Cys Val
                    230
                                        235
Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Val Ile Phe Met
               245
                                    250
Tyr Leu Gln Pro Thr Ser Ser His Ser Met Asp Thr Asp Lys Thr Val
                                265
           260
Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Met Val Tyr
                            280
Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Phe Lys Lys Val Val Glu
                       295
Lys Ala Lys Tyr Ser Leu Gly Phe
305
                    310
```

<211> 315

<212> PRT

<213> Mus musculus

<400> 1738

Met Met Gln Asn Ile Ser Glu Leu Ser Glu Phe Ile Leu Val Gly Leu 10 Thr Asp Ala Pro Phe Leu Gln Thr Pro Leu Phe Ile Ile Phe Thr Leu 25 2.0 Ile Tyr Leu Thr Thr Leu Phe Gly Asn Leu Gly Met Ile Met Leu Ile 40 Leu Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn Leu Ser Leu Val Asp Cys Val Tyr Ala Ser Ala Val Thr Pro Lys Val Met Glu Gly Phe Leu Thr Gly Asn Lys Ile Ile Ser Tyr Asn Ala Cys 90 85 Ala Ala Gln Met Phe Phe Phe Val Ala Phe Ala Ile Thr Glu Asn Phe 105 Ile Leu Ala Ser Met Ala Tyr Asp Arg His Ala Ala Val Cys Lys Pro 120 Leu His Tyr Ser Thr Thr Met Thr Thr Thr Ile Cys Val Leu Leu 130 135

```
Val Gly Ser Tyr Leu Ser Gly Leu Leu His Ser Ser Ile His Val Ser
                    150
                                        155
Phe Thr Phe His Leu Ser Phe Cys Arg Ser Asn Val Val Asn His Phe
                                    170
                165
Phe Cys Asp Ile Pro Pro Leu Leu Ala Val Ser Cys Ser Ser Ile Arq
                                185
Thr Asn Glu Ile Ile Leu Phe Met Leu Ala Gly Phe Asp Val Ala Phe
                            200
                                                 205
Ser Leu Leu Val Ile Leu Thr Ser Tyr Leu Leu Ile Ser Val Ala Ile
                        215
                                            220
Val Arg Met Arg Ser Ala Glu Ser Arg Lys Lys Ala Ile Ser Thr Cys
                    230
                                        235
Ala Ser His Leu Thr Thr Val Ser Ile Phe Tyr Gly Thr Ile Ile Phe
                245
                                    250
Met Tyr Leu Gln Pro Ser Ser Asn His Ser Met Asp Thr Asp Lys Leu
            260
                                265
Ala Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Val
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Phe Lys Lys Val Ala
                        295
Gly Lys Ala Val Leu Ser Leu Gly Leu Ile Asn
                    310
```

<211> 309

<212> PRT

<213> Mus musculus

<400> 1739

Met Ser Leu Met Glu Asn Asn Thr Asp Val Thr Gln Phe Leu Leu Leu Gly Leu Thr Asp Asp Pro Gly Leu Gln Phe Pro Leu Phe Ile Thr Phe Leu Leu Ile Tyr Thr Ile Thr Leu Val Gly Asn Leu Gly Met Ile Leu Leu Ile Val Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu 55 Gly Asn Leu Ser Leu Val Asp Phe Cys Tyr Ser Ser Ala Val Thr Pro 70 75 Thr Val Met Thr Gly Leu Ile Gly Glu Lys Ile Ile Ser Tyr Asn Asp 85 90 Cys Ala Ala Gln Met Phe Phe Phe Val Ala Phe Ala Thr Val Glu Asn 100 105 110 Tyr Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys 120 Pro Leu His Tyr Ala Thr Thr Met Thr Ala Asn Val Cys Ile Cys Leu 135 140 Cys Ile Gly Ser Tyr Thr Cys Gly Phe Leu Asn Ala Ser Ile His Ile 150 155 Gly Asp Thr Phe Ser Leu Ser Phe Cys Arg Ser Asn Val Val His His 165 170 Phe Phe Cys Asp Ile Pro Ala Val Met Val Leu Ser Cys Ser Asp Arg 185 His Val Ser Glu Leu Val Leu Val Tyr Val Val Ser Phe Asn Ile Phe 200 205 Phe Ala Leu Ser Val Ile Trp Ile Ser Tyr Ile Phe Ile Phe Ile Thr

210 215 220 Ile Cys Lys Met His Ser Ser Ser Gly Tyr Arg Lys Ala Ile Ser Thr 230 235 Cys Ala Ser His Phe Ile Ala Val Ser Ile Phe Tyr Gly Thr Ile Ile 245 250 Phe Met Tyr Leu Gln Pro Ser Ser Ser His Ser Met Asp Thr Asp Lys 260 265 Ile Ala Ser Val Phe Tyr Thr Met Ile Ile Pro Met Leu Asn Pro Leu 280 Val Tyr Ser Met Arg Asn Lys Glu Val Lys Ser Ala Phe Thr Lys Val 295 Leu Gln Val Ala Lys 305 <210> 1740 <211> 310 <212> PRT <213> Mus musculus <400> 1740 Met Thr Ser Leu Asn Asn Leu Thr Glu Val Thr His Phe Leu Leu Leu Gly Leu Thr Asp Asp Pro Gly Leu Gln Leu Pro Leu Phe Ile Ile Phe 25 Leu Leu Ile Tyr Ile Ile Thr Leu Val Gly Asn Leu Gly Met Ile Leu Leu Ile Leu Leu Asp Ser Arg Leu His Ile Pro Met Tyr Phe Phe Leu 55 60 Ala Asn Leu Ser Leu Val Asp Val Ile Tyr Ser Ser Ala Val Thr Pro 70 75 Lys Val Met Ala Gly Leu Ile Ile Gly Asp Asn Leu Ile Ser Tyr Asn 90 85 Glu Cys Ala Ala Gln Met Phe Phe Phe Ala Ala Phe Ala Thr Val Glu 105 Asn Tyr Leu Leu Thr Ser Met Ala Cys Asp Arg Tyr Ala Ala Val Cys 115 120 125 Lys Pro Leu Tyr Tyr Ala Thr Thr Met Thr Pro Ser Val Cys Met Cys 135 140 Phe Ile Met Gly Cys Tyr Ala Leu Gly Phe Leu Asn Ala Ser Val Tyr 150 155 Leu Gly Asn Thr Phe Ser Leu Ser Phe Cys Lys Ser Asn Val Val His 165 170 His Phe Phe Cys Asp Met Pro Ala Ile Met Ala Leu Ser Cys Ser Asp 180 185 Arg His Val Asn Glu Leu Val Leu Ile Tyr Gln Ala Ser Phe Ile Ile 195 200 205 Phe Phe Ala Leu Ile Ile Ile Leu Ile Ser Tyr Ile Ile Ile Phe Ile 215 Thr Ile Leu Lys Met His Ser Glu Ala Gly Val Gln Lys Ala Leu Ser 230 235 Thr Cys Ala Ser His Phe Thr Ala Val Phe Ile Phe Tyr Gly Thr Thr 250 Ile Phe Met Tyr Leu Gln Pro Ser Ser Arg His Ala Met Asp Thr Asp 260 265

Lys Ile Val Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro 280

285

Leu Val Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Phe Met Lys 295 Val Val Leu Lys Glu Lys <210> 1741 <211> 307 <212> PRT <213> Mus musculus <400> 1741 Met Glu Asn Thr Thr Glu Val Thr Trp Phe Val Leu Leu Gly Leu Thr 5 10 Asn Asp Pro Gln Leu Gln Leu Pro Leu Phe Ile Thr Phe Leu Leu Ile 25 Tyr Ile Ile Thr Leu Val Gly Asn Leu Gly Ile Ile Leu Leu Ile Leu 40 Leu Asp Ser Arg Leu His Thr Pro Met Tyr Ile Phe Leu Ser Asn Leu Ser Leu Val Asp Phe Cys Tyr Ser Ser Thr Ile Thr Pro Lys Val Met 70 75 Ala Gly Phe Leu Thr Gly Asp Arg Ile Ile Ser Tyr Asn Ala Cys Ala 90 Ser Gln Met Phe Phe Phe Ala His Phe Ala Asp Val Glu Ser Tyr Leu 100 105 110 Leu Val Ser Met Ala Tyr Asp His Tyr Val Ala Val Cys Lys Pro Leu 115 120 125 His Tyr Ala Thr Thr Met Thr Thr His Leu Cys Val Phe Leu Val Ile 135 140 Gly Cys Tyr Ile Cys Gly Phe Leu Asn Ala Ser Ile Tyr Thr Val Asp 150 155 Val Phe Ser Leu Ser Phe Cys Glu Ser Asn Val Ile His His Phe Phe 170 Cys Asp Val Leu Ala Val Met Ile Ile Ser Arg Ser Asp Lys Tyr Ile 180 185 Asn Glu Leu Val Leu Ile Ser Val Ala Ser Phe Asn Ile Ile Phe Ser 200 Leu Ile Leu Ile Ser Tyr Met Phe Ile Phe Thr Asn Ile Leu 215 220 Lys Ile Asn Ser Ser Glu Gly Tyr Arg Lys Ala Leu Ser Thr Cys Thr 230 235 Ser His Phe Thr Ala Val Phe Ile Tyr Tyr Gly Thr Val Ile Phe Met 250 245 Tyr Leu Gln Pro Thr Ser Ser His Ser Met Asp Thr Asp Lys Ile Val 265 Ser Val Phe Tyr Ser Ile Val Ile Pro Met Leu Asn Pro Leu Val Tyr 280 Ser Met Arg Asn Lys Glu Val Lys Asn Ala Phe Thr Lys Val Val Leu 290 295 Arg Ser Arg 305

<210> 1742 <211> 307 <212> PRT

```
<400> 1742
Met Glu Asn Arg Thr Glu Val Arg Cys Phe Ile Leu Val Gly Leu Thr
                                    10
Asn Asp Pro Gly Leu Gln Leu Pro Leu Phe Ile Thr Phe Leu Leu Ile
Tyr Ile Ile Thr Leu Ile Gly Asn Leu Gly Leu Ile Leu Leu Ile Leu
                            40
Leu Asp Ser Arg Leu His Thr Pro Met Tyr Ile Phe Leu Gly Asn Leu
                        55
Ser Leu Val Asp Phe Cys Tyr Ser Ser Thr Val Thr Pro Lys Val Ile
                    70
                                        75
Ala Gly Phe Leu Met Gly Asp Lys Ile Met Ser Tyr Asn Ala Cys Ala
                85
                                    90
Ser Gln Met Phe Phe Phe Ala Asn Phe Ala Asp Val Glu Asn Tyr Leu
                                105
Leu Val Ser Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Lys Pro Leu
                            120
His Tyr Ala Thr Thr Met Thr Thr His Met Cys Val Cys Leu Leu Ile
                        135
Gly Cys Tyr Ile Cys Gly Phe Leu Asn Ala Ser Ile Tyr Thr Val Asp
                    150
                                        155
Ala Leu Ser Leu Ser Phe Cys Glu Ser Asn Val Val His His Phe Phe
                                    170
                165
Cys Asp Val Leu Ala Val Met Ile Ile Ser Cys Ser Asp Arg His Val
            180
                                185
Asn Glu Leu Ile Phe Val Tyr Val Ala Ser Phe Asn Ile Phe Phe Ala
                            200
                                                205
Leu Ile Leu Ile Ile Ile Ser Tyr Thr Phe Ile Phe Thr Asn Ile Leu
                        215
                                            220
Lys Leu Gln Ser Ala Ala Gly Tyr Arg Lys Ala Phe Phe Thr Cys Ala
                    230
                                        235
Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Ile Ile Phe Met
                245
                                    250
Tyr Leu Gln Pro Ser Ser Ser His Ser Met Asp Thr Asp Lys Ile Ala
                                265
                                                    270
Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Val Tyr
                           280
Ser Leu Arg Asn Lys Asp Val Lys Ser Ala Phe Thr Lys Ile Ile Leu
   290
                        295
                                            300
Arg Ser Gly
305
<210> 1743
<211> 308
<212> PRT
<213> Mus musculus
<400> 1743
Met Met Glu Asn Gln Thr Glu Val Thr Glu Phe Ile Leu Leu Gly Leu
                                    10
Thr Asp Asp Pro Glu Leu Gln Ile Pro Leu Phe Ile Thr Phe Leu Ala
                                25
Ile Tyr Thr Ile Thr Val Val Gly Asn Leu Gly Met Ile Leu Leu Ile
```

45

```
Leu Met Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Gly Asn
                        55
Leu Ser Leu Val Asp Phe Cys Tyr Ser Ser Ala Val Thr Pro Lys Val
                    70
                                        75
Met Ser Gly Phe Leu Ile Gly Asp Lys Val Ile Ser Tyr Asn Asp Cys
Ala Ala Gln Met Phe Ile Phe Ala Ala Phe Ile Thr Val Glu Asn Tyr
           100
                               105
Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys Pro
                           120
Leu His Tyr Thr Thr Thr Met Thr Thr Ser Val Cys Thr Trp Leu Ile
                       135
                                          140
Ile Gly Ser Tyr Val Ile Gly Phe Met Asn Ala Ser Ile His Ile Gly
                   150
                                       155
Asp Thr Phe His Leu Tyr Phe Cys Glu Ser Asn Val Val His His Phe
               165
                                   170
Phe Cys Asp Ile Pro Ala Val Met Val Leu Ser Cys Ser Asp Arg Tyr
                               185
Ala Ser Glu Leu Val Leu Val Tyr Ile Val Ser Phe His Ile Phe Phe
                            200
Ala Phe Ile Val Ile Trp Ile Ser Tyr Val Phe Ile Phe Val Thr Ile
                       215
                                           220
Val Lys Met Gln Ser Ala Ala Gly His His Lys Ala Ile Ser Thr Cys
                   230
                                       235
Ala Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Ser Ile Phe
               245
                                   250
Met Tyr Val Gln Pro Ser Ser Asn His Ser Met Asp Thr Asp Lys Ile
           260
                               265
Ala Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Val
                           280
                                              285
Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Leu Lys Lys Ile Ile
Leu Gln Thr Thr
305
```

```
<210> 1744
```

<400> 1744

Met 1	Glu	Asn	Ile	Ser 5	Glu	Val	Thr	Glu	Phe 10	Ile	Leu	Val	Gly	Ile 15	Thr
Asp	Ala	Pro	Glu 20	Leu	Gln	Ile	Pro	Leu 25	Phe	Ile	Ile	Phe	Thr 30	Leu	Ile
Tyr	Leu	Ile 35	Ala	Leu	Phe	Gly	Asn 40	Leu	Gly	Met	Ile	Met 45	Leu	Ile	Leu
Leu	Asp 50	Ser	Arg	Leu	His	Thr 55	Pro	Met	Tyr	Phe	Phe 60	Leu	Cys	Asn	Leu
Ser 65	Leu	Val	Asp	Cys	Val 70	Tyr	Ala	Ser	Ala	Val 75	Thr	Pro	Lys	Val	Met 80
Glu	Gly	Phe	Leu	Thr 85	Gly	Asn	Lys	Ile	Ile 90	Ser	Tyr	Asn	Ala	Cys 95	Ala
Ala	Gln	Met	Phe 100	Phe	Phe	Val	Ala	Phe 105	Ile	Ala	Ile	Glu	Ser 110	Leu	Ile
Leu	Ala	Ser	Met	Ala	Tyr	Asp	Arg	His	Ala	Ala	Val	Cys	Asn	Pro	Leu

<211> 314

<212> PRT

<213> Mus musculus

```
115
                           120
His Tyr Thr Thr Ile Met Thr Ser Thr Thr Cys Ile Leu Ile Val Thr
                       135
                                           140
Cys Cys Tyr Met Cys Gly Ile Leu Gln Ser Ser Ile His Val Ala Leu
                    150
                                        155
Ala Phe Cys Leu Ser Phe Cys Asn Ser Asn Val Ile Asn His Phe Phe
               165
                                    170
Cys Asp Ile Pro Pro Leu Leu Asp Ile Ser Cys Ser Asp Thr Tyr Thr
                               185
Asn Glu Ile Thr Val Leu Ile Leu Gly Thr Cys Asp Gly Ile Leu Thr
                           200
                                                205
Leu Leu Val Ile Leu Asn Thr Tyr Leu Leu Ile Phe Ile Ala Ile Leu
                       215
                                            220
Arg Met Arg Ser Val Glu Ala Gln Arg Lys Ala Phe Ser Thr Cys Ala
                   230
                                       235
Ser His Leu Ile Thr Val Ser Ile Phe Phe Gly Ser Thr Leu Phe Met
                                    250
Tyr Leu Gln Pro Ser Ser Asn His Ser Met Asn Thr Asp Lys Ile Ala
            260
                                265
Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Val Val Tyr
                            280
                                               285
Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Phe Lys Lys Val Val Gly
                       295
Lys Leu Met Thr Ser Leu Gln Leu Val Asn
                    310
```

<211> 307

<212> PRT

<213> Mus musculus

<400> 1745

Met Glu Asn Arg Thr Glu Val Thr Trp Phe Ile Leu Val Gly Leu Thr Asn Asp Ser Gln Leu Gln Leu Pro Leu Phe Ile Thr Phe Leu Leu Ile 25 Tyr Thr Val Thr Phe Val Gly Asn Leu Gly Leu Ile Leu Leu Ile Leu 40 Leu Asp Ser Arg Leu His Thr Pro Met Tyr Ile Phe Leu Ser Asn Leu 55 Ser Leu Val Asp Phe Cys Tyr Ser Ser Thr Ile Thr Pro Lys Val Ile 75 Ala Gly Ile Leu Thr Gly Asp Lys Ile Met Ser Tyr Asn Ala Cys Ala 8.5 90 Ser Gln Met Phe Phe Phe Ala Asn Phe Ala Asn Val Glu Asn Tyr Leu 105 Leu Val Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu 120 His Tyr Ala Thr Thr Met Thr Lys Arg Val Cys Ala Ser Leu Val Ile 130 135 140 Gly Cys Tyr Ile Cys Gly Leu Leu Asn Ala Ser Ile Tyr Thr Met Asp 150 155 Ala Leu Ser Leu Ser Phe Cys Glu Ser Asn Val Val His His Phe Phe 165 170 Cys Asp Val Leu Ala Ile Met Thr Thr Ser Cys Ser Asp Arg His Val 185

```
Asn Glu Leu Ile Leu Val Tyr Leu Ala Ser Phe Asn Val Phe Phe Ala
                           200
Leu Ile Leu Ile Ser Tyr Met Phe Ile Phe Thr Asn Ile Leu
                                           220
                       215
Lys Met His Ser Ala Ser Gly Tyr Cys Lys Ala Ile Ser Thr Cys Ala
                   230
Ser His Leu Thr Ala Val Phe Ile Phe Tyr Gly Thr Ile Ile Phe Met
                                   250
               245
Tyr Leu Gln Pro Ser Ser His His Ser Met Asp Thr Asp Lys Ile Ala
                               265
Ser Val Phe Tyr Thr Met Ile Ile Pro Met Leu Asn Pro Leu Val Tyr
                        280
Ser Leu Arg Asn Lys Asp Val Lys Ser Ala Phe Thr Lys Ile Val Leu
                      295
                                           300
Arg Ser Gly
305
<210> 1746
<213> Mus musculus
```

<211> 312 <212> PRT

<400> 1746

Met Ile Ala Arg Gly Asn Ser Thr Glu Ile Thr Gln Phe Ile Leu Leu 10 Gly Phe Thr Asp Leu Pro Ile Ile Ile Leu Leu Phe Val Thr Phe 20 25 Leu Leu Ile Tyr Ile Thr Thr Leu Thr Trp Asn Leu Ser Leu Ile Val 40 Leu Ile Arg Met Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu 55 Cys Asn Leu Ser Ile Ile Asp Leu Cys Tyr Val Thr Ser Thr Val Pro 70 75 Lys Met Leu Ser Asn Phe Phe Gln Glu Arg Gln Thr Asn Ser Phe Val 90 85 Gly Cys Ile Val Gln Asn Phe Ile Phe Ser Thr Met Gly Leu Ser Glu 105 Ser Cys Leu Met Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys 120 125 Asn Pro Leu Leu Tyr Ala Ser Ile Met Ser Pro Thr Leu Cys Val Leu 135 140 Met Val Leu Ala Ser Tyr Leu Ser Gly Leu Thr Ala Ser Leu Leu Gln 150 155 Leu Phe Ala Leu Leu Arg Leu His Phe Cys Gly Thr Asn Val Ile Lys 170 His Phe Phe Cys Asp Met Pro Gln Leu Leu Val Leu Ser Cys Thr Asp 180 185 Thr Phe Phe Val Gln Val Leu Thr Ala Ile Leu Thr Met Ile Phe Gly 195 200 Phe Val Asn Met Leu Val Ile Met Ile Ser Tyr Val Tyr Ile Val Leu 215 Ser Ile Leu Lys Ile Thr Ser Ala Lys Gly Arg Ser Lys Ala Phe Asn 230 235 Thr Cys Ala Ser His Leu Thr Ala Val Ser Leu Phe Tyr Thr Ser Ser 245 250 Ile Phe Val Tyr Leu Ser Ser Ser Ser Gly Gly Ser Ser Ser Phe Asp

Arg Phe Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro 275

Leu Ile Tyr Ser Leu Lys Asn Arg Glu Ile Lys Asp Ala Met Lys Arg 290

Leu Gln Lys Lys Thr Ile Cys Asn 310

<210> 1747 <211> 315 <212> PRT <213> Mus musculus

<400> 1747

Met Glu Ala Met Ile Lys Gly Lys Asn Ile Thr Glu Ile Thr Glu Phe Ile Leu Leu Gly Phe Ser Asp Phe Pro Gln Ile Thr Ala Leu Leu Phe 25 Val Ile Phe Leu Thr Leu Tyr Ile Thr Ala Leu Thr Trp Asn Leu Ser 40 4.5 Leu Val Val Leu Ile Arg Met Asp Ser Tyr Leu His Thr Pro Met Tyr 55 Phe Phe Leu Ser Asn Leu Ser Phe Ile Asp Ile Cys Tyr Ile Ser Ser 70 7.5 Thr Val Pro Lys Met Leu Phe Asn Phe Phe Gln Lys Arg Gln Thr Ile 85 90 Ser Phe Val Gly Cys Ile Val Gln Tyr Phe Met Phe Ser Thr Met Gly 110 100 105 Leu Ser Glu Ser Cys Leu Met Thr Ala Met Ala Tyr Asp Arg Tyr Ala 120 125 Ala Ile Cys Asn Pro Leu Leu Tyr Ser Ser Val Met Ser Pro Thr Leu 135 140 Cys Ala Arg Met Val Met Gly Ser Tyr Thr Ala Gly Phe Ile Gly Ser 150 155 Val Ser Gln Val Phe Ala Met Leu Gln Leu His Phe Cys Gly Pro Asn 165 170 Val Ile Arg His Phe Phe Cys Asp Ile Pro Gln Leu Leu Asn Leu Ser 185 Cys Thr Asp Thr Phe Phe Ala His Val Glu Leu Leu Ile Leu Thr Met 200 205 Leu Phe Cys Ile Ser Asn Ala Leu Val Ile Ile Ser Tyr Gly Tyr 215 220 Ile Val Leu Ser Ile Leu Lys Ile Thr Ser Ala Lys Gly Arg Ser Lys 230 235 Ala Phe Asn Thr Cys Ala Ser His Leu Thr Ala Val Ser Leu Phe Tyr 245 250 Thr Ser Thr Ala Phe Val Tyr Phe Ser Ser Ser Gly Gly Ser Ser 265 Ser Phe Asp Arg Phe Val Ser Val Phe Tyr Thr Val Leu Ile Pro Met 280 285 Leu Asn Pro Leu Val Tyr Ser Leu Arg Asn Lys Glu Ile Lys Asp Ala 295 Gly Lys Arg Leu Gln Lys Lys Leu Gly Cys Cys 310

```
<212> PRT
<213> Mus musculus
<400> 1748
Met Ile Gly Glu Arg Asn Ile Thr Lys Ile Thr Gln Phe Ile Leu Leu
                                   10
Gly Phe Ser Asp Phe Pro Arg Ile Thr Val Pro Leu Phe Val Met Phe
                                25
Leu Met Ile Tyr Thr Leu Ala Val Thr Trp Asn Phe Ser Leu Ile Ala
                            40
Leu Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu
                        55
                                            60
Ser Asn Leu Ser Ile Ile Asp Ile Cys Tyr Ile Thr Ser Thr Ala Pro
                    70
                                        75
Lys Met Leu Ser Asn Phe Phe Gln Glu Lys Gln Thr Ile Ser Phe Val
                85
                                    90
Gly Cys Ile Val Gln Tyr Phe Ile Leu Ser Thr Met Gly Leu Thr Glu
                                105
Ser Cys Leu Met Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys
                           120
                                                125
Asn Pro Leu Leu Tyr Ser Ser Val Met Ser Pro Thr Leu Cys Ala Gln
                       135
                                            140
Met Val Met Gly Ser Tyr Thr Ala Gly Leu Thr Gly Ser Val Ser Gln
                   150
                                       155
Ile Cys Ala Leu Leu Gln Leu Tyr Phe Cys Gly Pro Asn Val Ile Arg
               165
                                   170
                                                        175
His Phe Phe Cys Asp Ile Ser Gln Leu Leu Asn Leu Ser Cys Ser Asp
           180
                               185
Ala Phe Phe Val Gln Val Leu Leu Ala Ile Leu Thr Met Cys Phe Gly
                            200
Ile Ala Asn Ala Leu Ala Thr Met Leu Ser Tyr Gly Phe Ile Val Leu
                        215
Ser Ile Leu Lys Ile Thr Ser Ala Lys Gly Arg Ser Lys Ala Phe Asn
                    230
                                        235
Thr Cys Ala Ser His Leu Thr Ala Val Ser Leu Phe Tyr Ser Thr Ala
                                   250
Ile Phe Val Tyr Leu Arg Ser Ser Ser Gly Gly Ser Ser Ser Phe Asp
           260
                                265
Arg Phe Ala Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro
                           280
                                                285
Leu Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Asp Ala Met Lys Arg
                       295
                                            300
Leu Gln Lys Lys Ile Cys Ser
                    310
<210> 1749
<211> 312
<212> PRT
<213> Mus musculus
<400> 1749
Met Ile Gly Gly Arg Asn Ile Thr Lys Ile Thr Gln Phe Ile Leu Leu
                5
                                    10
Gly Phe Ser Asp Phe Pro Gln Ile Thr Ala Leu Leu Phe Val Met Phe
```

<210> 1748 <211> 312

```
25
Leu Thr Leu Tyr Ile Thr Ala Leu Thr Trp Asn Leu Ser Leu Val Val
                           40
                                               4.5
Leu Ile Arg Met Asp Ser Tyr Leu His Thr Pro Met Tyr Phe Phe Leu
                       55
Ser Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ile Ser Ser Thr Val Pro
Lys Met Leu Ser Asn Leu Phe Gln Glu Lys Gln Thr Ile Ser Phe Val
               85
                                   90
Gly Cys Ile Val Gln Tyr Phe Ile Phe Ser Thr Met Gly Leu Ser Glu
                               105
Ser Cys Leu Met Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys
                           120
Asn Pro Leu Leu Tyr Ser Ser Val Met Ser Pro Thr Leu Cys Ala Arg
                       135
                                           140
Met Val Met Gly Ser Tyr Thr Ala Gly Leu Val Ser Ser Leu Ser Gln
                   150
                                       155
Ile Cys Val Leu Gln Leu His Phe Cys Gly Pro Asn Val Ile Arg
                                   170
               165
His Phe Phe Cys Asp Met Pro Gln Leu Leu Asn Leu Ser Ser Asn Asp
                                185
Thr Phe Phe Ala His Val Leu Leu Val Ile Leu Thr Met Phe Phe Gly
       195
                           200
                                                205
Leu Ile Asn Ala Leu Ala Ile Met Val Ser Tyr Gly Tyr Ile Ala Ser
                       215
Ser Ile Met Lys Ile Thr Ser Val Asn Gly Arg Ser Lys Ala Phe Asn
                                       235
                   230
Thr Cys Ala Ser His Leu Thr Ala Val Ser Leu Phe Tyr Ser Ser Gly
               245
                                    250
Ile Phe Val Tyr Leu Ser Ser Ser Ser Gly Gly Ser Ser Ser Phe Asp
           260
                               265
Arg Phe Ala Ser Val Phe Tyr Ser Val Val Ile Pro Met Leu Asn Pro
                           280
                                               285
Leu Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Asp Ala Met Asn Arg
                       295
Leu Gln Lys Lys Val Ile Cys Ser
305
```

<210> 1750 <211> 315 <212> PRT

<213> Mus musculus

```
Gly Cys Thr Met Gln Tyr Phe Ile Phe Ser Ser Leu Gly Leu Ser Glu
           100
                                105
Cys Cys Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys
                           120
Asn Pro Leu Leu Tyr Thr Ala Ile Met Ser Pro Ser Leu Cys Val His
                        135
                                            140
Met Val Val Gly Ala Tyr Ser Thr Gly Leu Leu Gly Ser Leu Ile Gln
                   150
                                       155
Leu Cys Ala Ile Leu Gln Leu His Phe Cys Gly Pro Asn Ile Ile Asn
                                   170
His Phe Phe Cys Asp Leu Pro Gln Leu Leu Val Leu Ser Cys Ser Glu
                               185
          180
                                                    190
Thr Phe Pro Leu Gln Val Leu Lys Phe Val Ile Ala Val Ile Phe Gly
       195
                           200
                                                205
Val Ala Ser Val Ile Val Ile Leu Ile Ser Tyr Gly Tyr Ile Ile Gly
                       215
                                           220
Thr Ile Leu Asn Ile Ser Ser Val Glu Gly Arg Ser Lys Ala Phe Asn
                    230
                                        235
Thr Cys Ala Ser His Leu Thr Ala Val Thr Leu Phe Phe Gly Ser Gly
                245
                                    250
Leu Phe Val Tyr Met Arg Pro Ser Ser Asn Ser Ser Gln Gly Tyr Asp
                                265
                                                    270
Lys Met Ala Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro
                           280
Leu Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Asp Ala Leu Gln Arg
                       295
Cys Lys Asn Lys Cys Phe Ser Gln Cys His Cys
                    310
```

<211> 318

<212> PRT

<213> Mus musculus

<400> 1751

Met Ala Val Gly Arg Asn Ile Ser Val Val Thr Asn Phe Ile Leu Leu 10 Gly Phe Leu Glu Arg Pro Gln Leu Gln Ile Val Leu Phe Val Leu Phe 25 Leu Gly Ile Tyr Leu Val Thr Leu Ala Gly Asn Leu Gly Leu Ile Val 40 Leu Ile Arg Met Asp Ser His Leu His Ser Pro Met Tyr Phe Phe Leu 55 60 Ser Asn Leu Ser Phe Val Asp Val Ser Tyr Thr Ser Ser Ile Ala Pro 70 75 Lys Met Leu Cys Asp Phe Phe Arg Glu Gln Lys Ser Ile Thr Phe Ile 85 90 Gly Cys Ala Ile Gln Leu Phe Phe Phe Val Gly Met Gly Gly Thr Glu 105 110 Cys Cys Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser 115 120 125 Asn Pro Leu Leu Tyr Pro Ser Leu Met Ser Pro Thr Ile Cys Val Gly 135 140 Met Ala Ile Thr Val Tyr Thr Gly Gly Phe Leu Thr Gly Leu Ile Gln 150 155 Thr Ser Ser Ile Phe Arg Leu His Phe Cys Gly Pro Arg Val Ile Asn

```
165
                                  170
His Phe Phe Cys Asp Leu Pro Pro Leu Met Ser Leu Ser Cys Ser Ser
           180
                    185
Thr Phe Phe Ser Gln Val Val Asn Phe Leu Val Val Cys Val Val Gly
                           200
Gly Ala Ser Ala Leu Val Val Leu Val Ser Tyr Gly Tyr Ile Ile Ala
                       215
                                           220
Ala Val Met Arg Ile His Ser Thr His Gly Gln Met Lys Ala Phe Asn
                  230
                                      235
Thr Cys Ala Ser Tyr Leu Thr Thr Val Ile Leu Phe Tyr Gly Ser Gly
                                  250
               245
Leu Phe Ser Tyr Leu His Ser Asn Ala Gly Tyr Ser Gln Asp Lys Asn
          260
                              265
Lys Val Val Ser Met Phe Tyr Gly Ala Val Ile Pro Met Leu Asn Pro
       275
                          280
                                              285
Ile Ile Tyr Ser Leu Arg Asn Lys Glu Ile Lys Glu Ala Leu Lys Lys
                      295
Leu Lys Lys Arg Lys Lys Gln Met Ser Cys Leu Cys Ala Met
                   310
```

<211> 317

<212> PRT

<213> Mus musculus

<400> 1752

Met Ala Leu Thr Asn Thr Trp Asn Ser Ser Ser Val Thr Met Phe Ile 10 Phe Leu Gly Phe Ser Asp His Pro Glu Leu Arg Ile Phe Leu Phe Leu 25 Thr Phe Leu Ser Ile Tyr Leu Val Thr Leu Thr Trp Asn Leu Ala Leu 40 Ile Phe Leu Ile Arg Gly Asp Ile His Leu His Thr Pro Met Tyr Phe 55 Phe Leu Ser Asn Leu Ser Phe Val Asp Ile Cys Tyr Ser Ser Val 70 7.5 Ala Pro Lys Met Leu Ser Asp Phe Phe Arg Glu Gln Lys Thr Ile Ser 90 Phe Leu Gly Cys Gly Ala Gln Phe Phe Phe Phe Val Gly Leu Gly Leu 100 105 Thr Glu Cys Phe Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala 120 125 Ile Ser Asn Pro Leu Leu Tyr Thr Thr Ile Met Pro Gln Gly Leu Cys 135 140 Met Arg Met Val Ala Gly Ala Tyr Leu Gly Gly Phe Leu Ser Ser Phe 150 155 Ile Gln Ala Ser Ser Ile Phe Gln Leu His Phe Cys Gly Pro Asn Val 165 170 Ile Asn His Phe Phe Cys Asp Leu Pro Pro Ile Leu Ala Leu Ser Cys 185 180 Ser Asn Thr Phe Leu Ser Gln Val Val Asn Phe Leu Ile Val Ile Thr 200 Val Gly Gly Thr Ser Phe Leu Ile Leu Leu Ile Ser Tyr Ser Tyr Ile 215 220 Val Ser Ala Val Leu Lys Ile His Ser Val Arg Gly Arg Trp Lys Ala 230 235

 Phe
 Asn
 Thr
 Cys
 Ala
 Ser
 His
 Leu
 Met
 Ala
 Val
 Thr
 Met
 Leu
 Phe
 Gly

 Thr
 Ala
 Leu
 Phe
 Met
 Tyr
 Leu
 Arg
 Pro
 Ser
 Ser
 Ser
 Tyr
 Ser
 Phe
 Ser

 Arg
 Asp
 Lys
 Val
 Val
 Ser
 Val
 Phe
 Tyr
 Ser
 Leu
 Val
 Ile
 Pro
 Met
 Leu

 Asp
 Pro
 Leu
 Ile
 I

<210> 1753 <211> 313 <212> PRT <213> Mus musculus

<400> 1753

Met Glu Met Glu Asn Tyr Thr Arg Ile Lys Glu Leu Ile Phe Leu Gly Leu Thr Gln Ser Gln Gln Val Ser Ala Val Leu Phe Leu Phe Leu Leu 25 Leu Val Tyr Val Thr Thr Leu Leu Gly Asn Leu Leu Ile Met Val Thr 40 Val Thr Cys Glu Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Arg 55 60 Asn Leu Ser Val Ala Asp Ile Cys Phe Ser Ser Ile Thr Ala Pro Lys 70 75 Val Leu Val Asp Leu Thr Ser Asn Arg Lys Thr Ile Ser Phe Asn Gly 90 8.5 Cys Leu Thr Gln Met Phe Phe Phe His Leu Ile Gly Gly Val Asp Ala 105 Phe Ser Leu Ser Val Met Ala Leu Asp Arg Tyr Val Ala Ile Ser Lys 120 Pro Leu His Tyr Val Thr Ile Met Ser Arg Gly Arg Cys Ile Gly Leu 135 140 Ile Val Ala Ser Trp Val Gly Gly Phe Ala His Ser Ile Val Gln Ile 150 155 Ser Leu Leu Thr Leu Pro Phe Cys Gly Pro Asn Val Leu Asp Thr 165 170 Phe Tyr Cys Asp Val Pro Gln Val Ile Lys Leu Ala Cys Thr Asp Ile 185 Val Val Leu Glu Leu Leu Met Ile Ser Asn Asn Gly Met Leu Thr Thr 195 200 205 Leu Trp Phe Phe Leu Leu Val Ser Tyr Met Val Ile Leu Leu Leu 215 Leu Lys Ser Gln Ser Gly Glu Gly Lys Lys Lys Ala Ile Ser Thr Cys 230 235 Thr Thr His Ile Thr Val Val Thr Leu His Phe Val Pro Cys Ile Tyr 245 250 Val Tyr Ala Arg Pro Phe Thr Ala Leu Pro Thr Asp Lys Val Ile Ser 265 Val Thr Phe Thr Val Ile Ser Pro Leu Leu Asn Pro Leu Ile Tyr Thr 280 285 Leu Arg Asn Gln Glu Met Lys Ser Ala Met Arg Arg Leu Arg Lys Lys 290 295 300 Phe Arg Phe Ser His Trp Ile Glu Lys

305 . 310

<210> 1754

<400> 1755

```
<211> 310
<212> PRT
<213> Mus musculus
<400> 1754
Met Glu Leu Arg Asn Asp Thr Arg Val Lys Glu Phe Ile Phe Leu Gly
                                   10
Leu Thr Gln Ser Gln His Leu Ser Leu Val Leu Cys Leu Val Leu Cys
        20
                               25
Phe Val Tyr Val Thr Thr Leu Leu Gly Asn Leu Leu Ile Met Ile Ile
                           40
                                               4.5
Val Thr Phe Glu Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Arg
                       55
Asn Leu Ala Val Leu Asp Ile Cys Phe Ser Ser Ile Thr Ala Pro Lys
                                       75
Val Leu Val Asp Leu Leu Ala Lys Lys Lys Thr Ile Ser Tyr Ala Lys
               85
                                   90
Cys Met Thr Gln Met Phe Phe Phe His Leu Leu Gly Gly Ala Asp Ile
           100
                               105
Phe Ser Leu Ser Val Met Ala Phe Asp Arg Tyr Met Ala Ile Ser Lys
                           120
Pro Leu His Tyr Val Thr Ile Met Ser Ser Lys Arg Cys Thr Ala Leu
                       135
                                          140
Ile Ala Ala Ser Trp Val Gly Gly Phe Val His Ser Ile Val Gln Ile
                  150
                                       155
Ser Leu Leu Pro Leu Pro Phe Cys Gly Pro Asn Val Leu Asp Thr
               165
                                  170
Phe Tyr Cys Asp Val Pro Gln Val Leu Lys Leu Ala Cys Thr Asp Thr
                               185
Phe Val Leu Glu Leu Leu Met Ile Ser Asn Asn Gly Leu Val Thr Thr
       195
                           200
                                               205
Leu Trp Phe Ile Phe Leu Leu Val Ser Tyr Met Val Ile Leu Met Met
                       215
                                           220
Leu Arg Ser Gln Ala Gly Glu Asp Arg Arg Lys Ala Ile Ser Thr Cys
                  230
                                      235
Thr Ser His Ile Thr Val Val Thr Leu His Phe Val Pro Cys Ile Tyr
               245
                                   250
Val Tyr Ala Arg Pro Phe Thr Ala Leu Pro Thr Asp Lys Ala Ile Ser
                               265
Val Thr Phe Thr Val Ile Ser Pro Leu Leu Asn Pro Leu Ile Tyr Thr
                           280
                                              285
Leu Arg Asn Gln Glu Met Lys Ser Ala Ile Arg Arg Leu Lys Arg Lys
                       295
Leu Thr Pro Leu Glu Lys
<210> 1755
<211> 311
<212> PRT
<213> Mus musculus
```

```
Met Glu Leu Gly Asn His Thr Lys Val Thr Glu Phe Ile Phe Cys Gly
                                   10
Leu Thr Gln Ser Gln Glu Leu Ser Leu Leu Phe Phe Phe Leu Ser
                               25
Ile Val Tyr Ile Thr Thr Val Leu Val Asn Val Thr Ile Met Val Thr
Val Thr Trp Glu Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Arg
                       5.5
Asn Leu Ser Val Leu Asp Ile Cys Phe Ser Ser Ile Thr Val Pro Lys
Val Leu Val Asp Leu Leu Ser Arg Arg Lys Thr Ile Ser Phe Asn Gly
               85
                                   90
Cys Phe Thr Gln Ile Phe Phe Phe His Leu Leu Gly Gly Ala Asp Ile
           100
                               105
Phe Ser Leu Ser Val Met Ala Phe Asp Arg Tyr Met Ala Ile Phe Arg
                           120
Pro Leu His Tyr Val Thr Ile Met Ser Arg Gly Arg Cys Thr Ala Leu
                       135
                                           140
Ile Ala Ala Ser Trp Val Gly Gly Phe Val His Ser Ile Val Gln Ile
                                        155
Phe Leu Leu Pro Leu Pro Phe Cys Gly Pro Asn Val Val Asp Ser
               165
                                   170
                                            . 175
Phe Tyr Cys Asp Val Pro Gln Val Leu Lys Leu Ala Cys Thr Asp Thr
                               185
Phe Val Leu Glu Leu Leu Met Ile Ser Asn Asn Gly Leu Ile Thr Thr
                           200
                                                205
Leu Trp Phe Val Leu Leu Val Ser Tyr Thr Val Ile Leu Thr Met
                       215
                                           220
Leu Arg Ser His Thr Gly Glu Gly Arg Lys Lys Ala Ile Ser Thr Cys
                   230
                                       235
Thr Ser His Ile Thr Val Val Thr Leu His Phe Val Pro Cys Ile Tyr
                                   250
Val Tyr Ala Arg Pro Phe Thr Ala Leu Pro Met Asp Arg Ala Val Ser
           260
                                265
Ile Thr Leu Asn Ile Ile Val Pro Val Leu Asn Pro Met Ile Tyr Thr
                           280
                                               285
Leu Arg Asn Gln Glu Met Lys Ser Ala Met Lys Arg Leu Arg Lys Arg
                       295
Leu Ile Leu Ser Glu Val Glu
                   310
```

<210> 1756 <211> 314 <212> PRT <213> Mus musculus

<400> 1756

 Met Ser Gln Ile Asn His Thr Asn Val Lys Glu Phe Val Phe Leu Ala

 1
 5
 10
 15

 Leu Thr Arg Ile Arg Glu Leu Glu Phe Phe Leu Phe Ser Val Phe Phe 20
 25
 30

 Leu Val Tyr Val Thr Thr Val Leu Gly Asn Thr Leu Ile Val Val Thr 35
 40
 45

 Ile Thr Ala Glu Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Arg 50
 55
 60

 Asn Lys Ser Ile Leu Asp Ile Val Phe Ser Ser Ile Thr Val Pro Lys

```
65
                   70
Phe Leu Val Asp Leu Leu Ser Glu Arg Lys Ala Ile Ser Tyr Asn Gly
               85
                                   90
Cys Leu Thr Gln Ile Phe Phe Phe His Phe Ala Gly Gly Ala Asp Ile
                               105
Phe Phe Leu Ser Val Met Ala Tyr Asp Arg Tyr Leu Ala Ile Ala Lys
                           120
Pro Leu His Tyr Val Thr Ile Met Arg Arg Glu Val Trp Leu Ala Leu
                       135
                                           140
Val Val Ala Ser Trp Val Gly Gly Leu His Ser Ile Val Gln Ile
                  150
                                       155
Ile Leu Met Leu Pro Leu Pro Phe Cys Gly Pro Asn Thr Leu Asp Ala
               165
                                  170
Phe Tyr Cys Asp Ile Pro Gln Val Val Lys Leu Ala Cys Thr Asp Thr
           180
                               185
Phe Ala Leu Glu Leu Leu Met Ile Ser Asn Asn Gly Leu Val Thr Leu
       195
                           200
Leu Trp Phe Phe Leu Leu Gly Ser Tyr Thr Ile Ile Leu Val Met
                       215
Leu Arg Ser His Ser Gly Glu Gly Arg Asn Lys Ala Leu Ser Thr Cys
                   230
                                       235
Thr Ser His Ile Met Val Val Thr Leu His Phe Val Pro Cys Val Tyr
               245
                                   250
Ile Tyr Cys Arg Pro Phe Thr Thr Leu Pro Met Asp Thr Ala Ile Ser
                               265
Ile Asn Asn Thr Val Ile Thr Pro Met Leu Asn Pro Met Ile Tyr Thr
                           280
                                               285
Leu Arg Asn Gln Glu Met Lys Ser Ala Met Lys Arg Leu Gln Arg Arg
                       295
Leu Gly Pro Ser Glu Ser Asn Lys Leu Gly
                   310
```

<211> 320

<212> PRT

<213> Mus musculus

<400> 1757

Met Gly Asp Arg Glu Thr Ser Asn His Ser Asp Met Thr Asp Phe Ile 10 Leu Val Gly Phe Arg Val Ser Pro Glu Leu His Ile Leu Leu Phe Leu 25 Leu Phe Leu Leu Val Tyr Ala Met Ile Leu Leu Gly Asn Leu Gly Met 40 Met Ala Ile Ile Met Thr Asp Pro Arg Leu Asn Thr Pro Met Tyr Phe 55 Phe Leu Gly Asn Leu Ser Phe Ile Asp Leu Phe Tyr Ser Ser Val Ile 70 Ala Pro Lys Ala Met Ser Asn Phe Trp Thr Glu Ser Lys Ser Ile Ser 90 Phe Ala Gly Cys Val Ala Gln Ile Phe Leu Phe Ala Leu Phe Ile Val 100 105 Ala Glu Gly Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Phe Ile Ala 120 Ile Cys Asn Pro Leu Leu Tyr Ser Val His Met Ser Thr Arg Leu Cys 135

```
Thr Gln Leu Val Ala Gly Ser Tyr Phe Cys Gly Cys Ile Ser Ser Val
                    150
                                        155
Leu Gln Thr Ser Met Thr Phe Thr Leu Ser Phe Cys Ala Ser Arg Ala
                                   170
Ile Asp His Phe Tyr Cys Asp Ser Arg Pro Leu Gln Arg Leu Ser Cys
                                185
Ser Asp Ile Phe Ile His Lys Ile Val Ser Phe Ser Leu Ser Gly Ile
       195
                            200
                                                205
Ile Ile Leu Pro Thr Ile Thr Val Ile Ile Val Ser Tyr Met Tyr Ile
                       215
Val Ser Thr Val Leu Lys Ile Arg Ser Val Glu Gly Arg Lys Ala
                   230
                                        235
Phe Ser Thr Cys Ser Ser His Leu Gly Val Val Ser Val Leu Tyr Gly
                                   250
Ala Val Phe Phe Met Tyr Leu Thr Pro Asp Arg Phe Pro Glu Leu Ser
           260
                               265
Lys Leu Ala Ser Leu Cys Tyr Ser Leu Val Thr Pro Met Leu Asn Pro
                           280
Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Arg Asp Ala Leu Ser Lys
                       295
                                            300
Leu Leu Glu Lys Lys Lys Cys Ser Gly Ser Phe Phe Pro Phe Tyr Lys
                                        315
```

<211> 313

<212> PRT

<213> Mus musculus

<400> 1758

Met Gly Asp Arg Glu Thr Ser Asn His Ser Asp Met Thr Asp Phe Ile - 5 10 Leu Val Gly Phe Arg Val Ser Pro Glu Leu His Ile Leu Leu Phe Leu 25 Leu Phe Leu Leu Val Tyr Ala Met Ile Leu Leu Gly Asn Leu Gly Met Met Ala Ile Ile Met Thr Asp Pro Arg Leu Asn Thr Pro Met Tyr Phe 55 Phe Leu Gly Asn Leu Ser Phe Ile Asp Leu Phe Tyr Ser Ser Val Ile 70 Ala Pro Lys Ala Met Ser Asn Phe Trp Thr Glu Ser Lys Ser Ile Ser 90 8.5 Phe Ala Gly Cys Val Ala Gln Leu Phe Leu Phe Ala Leu Phe Ile Val 105 110 Ala Glu Gly Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Phe Ile Ala 115 120 125 Ile Cys Asn Pro Leu Leu Tyr Ser Val His Met Ser Thr Arg Leu Cys 135 140 Thr Gln Leu Val Ala Gly Ser Tyr Phe Cys Gly Cys Ile Ser Ser Val 150 155 Leu Gln Thr Ser Met Thr Phe Thr Leu Ser Phe Cys Ala Ser Arg Ala 165 170 Ile Asp His Phe Tyr Cys Asp Thr Arg Pro Val Gln Arg Leu Ser Cys 185 Asn Asn Leu Phe Val His Lys Ile Val Ser Phe Ser Leu Ser Ser Ile 200 205 Ile Ile Leu Pro Thr Val Ile Val Ile Ile Val Ser Tyr Met Tyr Ile

```
210
                      215
Val Ser Thr Val Leu Lys Ile Arg Ser Val Glu Gly Arg Lys Lys Ala
        230
                                       235
Phe Ser Thr Cys Ser Ser His Leu Gly Val Val Ser Val Leu Tyr Gly
               245
                                   250
Ala Val Phe Phe Met Tyr Leu Thr Pro Asp Arg Phe Pro Glu Leu Ser
                               265
Lys Leu Ala Ser Leu Cys Phe Ser Leu Val Thr Pro Met Leu Asn Pro
                           280
Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Arg Asp Ala Leu Ser Lys
                       295
Leu Leu Glu Lys Lys Lys Phe Ile Leu
                   310
<210> 1759
<211> 312
<212> PRT
<213> Mus musculus
<400> 1759
Met Ala Asn His Ser Ser Val Thr Lys Phe Ile Leu Leu Gly Leu Thr
                                   10
               5
Asn Asp Ile Asn Leu Gln Ala Val Leu Phe Leu Phe Leu Ile Leu Thr
                               25
Tyr Ile Leu Ser Val Met Gly Asn Ser Ala Ile Ile Leu Leu Thr Leu
                           4.0
Leu Asp His Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
                       55
Ala Phe Leu Glu Ile Ser Phe Thr Ser Val Phe Val Pro Lys Met Leu
                   70
                                       75
Ile Asn Ile Gly Thr Gly Asp Lys Thr Ile Ser Phe Ala Gly Cys Phe
                                   90
Thr Gln Tyr Phe Phe Ala Ile Leu Leu Gly Ala Thr Glu Phe Tyr Leu
           100
                               105
Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu
                           120
       115
                                               125
His Tyr Thr Thr Ile Met Ser Arg Arg Leu Cys Phe Gln Leu Val Leu
                       135
                                           140
Ser Ser Trp Leu Ser Gly Phe Ile Val Val Ala Val Pro His Ala Met
                   150
                                       155
Thr Leu Gln Leu Pro Phe Cys Ala Ser Asn Ile Ile Asn His Tyr Cys
                                   170
               165
Cys Asp Tyr Thr Ile Leu Leu His Leu Ser Cys Ser Asp Thr His Phe
           180
                               185
                                                   190
Ile Glu Val Ile Gln Phe Leu Leu Ala Ala Val Thr Leu Ile Leu Thr
                           200
Leu Leu Val Ile Leu Ser Tyr Thr His Ile Ile Lys Thr Ile Leu
                       215
Arg Ile Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                   230
                                       235
Ser His Met Ile Val Val Ser Leu Ser Tyr Gly Ser Cys Ile Phe Met
               245
                                   250
Tyr Ile Asn Pro Ser Phe Lys Asp Ala Ala Asn Phe Asn Lys Arg Val
           260
                               265
Ala Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
```

280

275

Thr Leu Arg Asn Lys Gln Val Lys Ile Ala Phe Lys Asp Met Leu Ser 295 Lys Thr Ile Ser Phe Phe Lys Lys 305 <210> 1760 <211> 315 <212> PRT <213> Mus musculus <400> 1760 Met Lys Leu Glu Gln Ser Arg Asn Tyr Thr Glu Leu Thr Asp Phe Ile 10 Leu Leu Gly Phe Trp Thr Ser Pro Glu Ala Gln Val Pro Leu Phe Leu 20 25 Leu Phe Leu Phe Ile Tyr Leu Val Ile Leu Leu Gly Asn Leu Ser Met Leu Thr Val Ile Lys Ile Asp Ser Arg Leu His Thr Pro Met Tyr Phe 55 Phe Leu Gln Asn Leu Ser Phe Leu Asp Leu Cys Tyr Ser Thr Val Ile 70 75 Ala Pro Lys Thr Leu Ala Thr Ile Phe Ser Lys Glu Lys Lys Ile Ser 8.5 90 Tyr Asn Glu Cys Ala Thr Gln Phe Phe Phe Ala Leu Phe Val Gly 105 100 Thr Glu Gly Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Ser Ala 120 Ile Cys Ser Pro Phe Leu Tyr Thr Val His Met Ser Gln Pro Ala Cys 135 130 140 Ile Arg Leu Val Ala Gly Ser Tyr Ile Cys Gly Cys Ile Asn Ser Met 150 155 Ile Gln Thr Gly Phe Thr Phe Ser Leu Arg Phe Cys Gly Glu Asn Arg 165 170 Leu Asp His Phe Phe Cys Asp Val Pro Ala Leu Ile Lys Ile Ser Cys 185 Val Asp Thr Phe Val Asn Glu Ile Val Leu Phe Ile Leu Ser Ala Leu 200 205 Ile Ile Ile Ser Thr Ile Thr Ile Ile Leu Val Ser Tyr Ala Tyr Ile 215 Leu Ser Thr Val Leu Lys Ile Pro Ser Thr His Gly Arg Ser Lys Thr 230 235 Phe Ser Thr Cys Gly Ser His Ile Ala Val Val Ser Leu Phe Tyr Gly 245 250 Thr Val Phe Phe Met Tyr Ala Gln Pro Gly Ser Ile Ser Ser Pro Glu 265 Lys Ser Lys Ile Val Ala Val Phe Tyr Thr Leu Ile Ile Pro Met Leu 280 Asn Pro Leu Ile Tyr Ser Leu Arg Asn Thr Glu Val Lys Ser Ala Leu 295 Lys Lys Thr Leu Leu Arg Lys Ile Ser Trp Gln 305 310

<210> 1761 <211> 315

<212> PRT

```
<400> 1761
Met Lys Leu Glu Gln Ser Arg Asn Tyr Thr Glu Leu Thr Asp Phe Ile
Leu Leu Gly Phe Trp Thr Ser Pro Glu Ala Arg Val Pro Leu Phe Leu
                                25
Leu Phe Leu Phe Ile Tyr Leu Val Ile Val Leu Gly Asn Leu Ser Met
                           40
Leu Thr Val Ile Lys Ile Asp Ser Arg Leu His Thr Pro Met Tyr Phe
                       55
Phe Leu Gln Asn Leu Ser Phe Leu Asp Leu Cys Tyr Ser Thr Val Ile
                   70
Ala Pro Lys Ala Leu Ala Thr Phe Phe Ser Lys Glu Lys Lys Ile Ser
               85
                                    90
Tyr Asn Glu Cys Ala Thr Gln Phe Phe Phe Phe Ala Leu Phe Val Gly
                               105
Thr Glu Gly Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Ser Ala
                            120
                                                125
Ile Cys Ser Pro Phe Leu Tyr Thr Val His Met Ser Gln Pro Ala Cys
                        135
Ile Arg Leu Val Ala Gly Ser Tyr Ile Cys Gly Cys Ile Asn Ser Met
                   150
                                        155
Ile Gln Thr Gly Phe Thr Phe Ser Leu Arg Phe Cys Gly Glu Asn Arg
                                   170
               165
Leu Asp His Phe Phe Cys Asp Val Pro Ala Leu Ile Lys Ile Ser Cys
            180
                               185
Val Asp Thr Phe Val Asn Glu Ile Val Leu Phe Ile Leu Ser Ala Leu
       195
                           200
                                                205
Ile Ile Ile Ser Thr Ile Thr Ile Ile Leu Val Ser Tyr Ala Tyr Ile
                       215
                                            220
Leu Ser Thr Val Leu Lys Ile Pro Ser Thr His Gly Arg Ser Lys Thr
                    230
                                        235
Phe Ser Thr Cys Gly Ser His Ile Ala Val Val Ser Leu Phe Tyr Gly
                                    250
                245
Thr Val Phe Phe Met Tyr Ala Gln Pro Gly Ser Ile Ser Ser Pro Glu
                                265
Lys Ser Lys Ile Val Ala Val Phe Tyr Thr Leu Ile Ile Pro Met Leu
                           280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Thr Glu Val Lys Ser Ala Leu
                        295
                                            300
Lys Lys Thr Leu Leu Arg Lys Ile Pro Trp His
                    310
<210> 1762
<211> 312
<212> PRT
<213> Mus musculus
<400> 1762
```

Met Lys Asn His Thr Glu Val Thr Val Phe Ile Leu Ala Gly Leu Thr 1 5 10 15

Asp Asp Pro Gln Trp Lys Val Val Leu Phe Ile Phe Leu Leu Leu Thr 20 25 30

Tyr Leu Leu Ser Val Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu 35 40 45

```
Val Asp Thr His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
                       55
Ser Phe Leu Glu Phe Ser Tyr Thr Thr Thr Cys Ile Pro Lys Leu Leu
                   70
                                      75
Val Thr Met Ala Thr Gly Asp Lys Thr Ile Ser Tyr Gly Asn Cys Val
                                   90
Thr Gln Val Phe Phe Ala Phe Leu Phe Gly Ala Ser Glu Phe Tyr Leu
           100
                              105
Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                          120
His Tyr Met Thr Ile Met Asn Asn Lys Val Cys Val Gln Leu Val Leu
                      135
                                        140
Ser Cys Trp Leu Ala Gly Phe Phe Val Ile Phe Pro Pro Leu Val Leu
                   150
                                      155
145
Gly Leu Asn Leu Glu Phe Cys Ala Ser Asn Ile Val Asp His Phe Tyr
                                   170
Cys Asp Thr Thr Pro Leu Leu Gln Ile Ser Cys Thr Asp Thr Gln Leu
           180
                               185
Leu Glu Thr Met Gly Phe Val Ser Ala Leu Val Thr Leu Leu Leu Thr
                           200
Leu Val Met Val Ile Ile Ser Tyr Thr Tyr Ile Ala Ile Thr Ile Leu
                       215
                                           220
Lys Ile Pro Ser Thr Glu Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                   230
                                      235
Ser His Met Ile Val Ile Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met
                                  250
              245
Tyr Val Lys Pro Ser Val Lys Gln Arg Ile Ser Ile Ser Lys Gly Ile
          260
                              265
Ser Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
                          280 285
Thr Leu Arg Asn Gln Gln Val Lys Lys Ala Phe Ile Thr Thr Val His
                       295
Arg Ile Ala Ser Ser Ser Lys Lys
                   310
```

```
<210> 1763
```

<400> 1763

Met 1	Lys	Asn	His	Thr 5	Arg	Val	Thr	Ile	Phe 10	Ile	Ile	Ala	Gly	Leu 15	Thr
Asp	Asp	Pro	Gln 20	Trp	Lys	Val	Val	Leu 25	Phe	Ile	Phe	Leu	Leu 30	Leu	Thr
Tyr	Leu	Leu 35	Ser	Ile	Thr	Gly	Asn 40	Leu	Thr	Ile	Ile	Thr 45	Leu	Thr	Leu
Val	Asp 50	Thr	His	Leu	Lys	Thr 55	Pro	Met	Tyr	Phe	Phe 60	Leu	Arg	Asn	Phe
Ser 65	Phe	Leu	Glu	Ile	Ser 70	Tyr	Thr	Thr	Thr	Cys 75	Ile	Pro	Lys	Leu	Leu 80
Val	Thr	Met	Ala	Thr 85	Gly	Asp	Lys	Thr	Ile 90	Ser	Tyr	Asn	Asn	Cys 95	Ala
Ala	Gln	Val	Phe 100	Phe	Ala	Phe	Leu	Leu 105	Gly	Ala	Ser	Glu	Phe 110	Tyr	Leu
Leu	Ala	Ala	Met	Ser	Tyr	Asp	Arq	Tyr	Val	Ala	Ile	Cys	Lys	Pro	Leu

<211> 312

<212> PRT

<213> Mus musculus

```
115
                           120
His Tyr Met Thr Ile Met Ser Asn Lys Val Cys Val Gln Leu Val Leu
                      135
                                          140
Ser Cys Trp Leu Ile Ser Phe Leu Ile Ile Phe Pro Pro Leu Val Leu
                   150
                                       155
Gly Leu Asn Leu Asp Phe Cys Ala Ser Asn Ile Ile Asp His Phe Tyr
                165
                                   170
Cys Asp Thr Thr Pro Leu Leu Gln Ile Ser Cys Thr Asp Thr Gln Leu
           180
                               185
Ile Glu Thr Ile Ala Phe Ile Ser Ala Leu Val Thr Leu Leu Thr
                           200
Leu Val Met Val Ile Ile Ser Tyr Thr Tyr Ile Ala Met Thr Ile Leu
                       215
                                           220
Lys Ile Pro Ser Thr Ser Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                  230
                                       235
Ser His Met Ile Val Ile Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met
               245
                                   250
Tyr Val Lys Pro Ser Val Lys Gln Arg Val Ser Ile Ser Lys Gly Ile
                               265
Ser Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
                           280
Thr Leu Arg Asn Gln Gln Val Lys Arg Ala Phe Ile Asn Thr Val His
                       295
Arg Ile Val Ser Phe Ser Lys Lys
```

<211> 316

<212> PRT

<213> Mus musculus

<400> 1764

Met Ile Ser Gln Arg Glu Met Lys Asn His Thr Arg Gln Ile Glu Phe Ile Leu Leu Gly Leu Thr Asp Asn Pro Gln Leu Gln Thr Leu Ile Phe 25 Val Ser Leu Leu Asn Tyr Leu Leu Ser Met Leu Gly Asn Leu Ala 40 Ile Ile Ala Leu Thr Leu Leu Asp Pro Ile Leu Lys Thr Pro Met Tyr 55 Phe Phe Leu Arg Asn Phe Ser Phe Leu Glu Ile Leu Phe Thr Thr 70 75 Cys Ile Pro Arg Phe Leu Ile Ser Ile Val Thr Gln Glu Lys Thr Ile 85 90 Ser Tyr Asn Gly Cys Val Cys Gln Leu Phe Phe Tyr Ile Phe Leu Gly 105 Ala Thr Glu Phe Phe Leu Ala Thr Met Ser Tyr Asp Arg Tyr Ile 115 120 Ala Ile Cys Lys Pro Leu His Tyr Ala Ser Ile Met Asn Ser Lys Val 135 140 Cys His Gln Leu Val Leu Gly Ser Trp Val Thr Gly Phe Leu Val Ile 150 155 Phe Pro Pro Leu Ile Ile Gly Leu Asp Leu Asp Phe Cys Ala Ser Asn 165 170 Val Ile Asp His Phe Leu Cys Asp Val Ser Pro Leu Leu Gln Leu Ser 180 185

```
Cys Ser Asn Thr Asn Leu Leu Asp Leu Met Ala Phe Ile Leu Ala Leu
       195
                           200
Met Thr Leu Ile Val Thr Leu Val Ile Val Ile Phe Ser Tyr Ala His
                       215
Ile Ala Lys Thr Ile Met Lys Phe Pro Ser Val Gln Gln Lys Lys Lys
                    230
                                        235
Ala Phe Ser Thr Cys Ser Ser His Met Ile Val Val Ser Leu Thr Tyr
               245
                                   250
Gly Ser Cys Ile Phe Ile Tyr Ile Lys Pro Ser Ala Asn Glu Arg Val
                               265
Thr Leu Ser Lys Gly Ile Ala Val Leu Asn Thr Ser Val Ala Pro Leu
                           280
Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn Lys Gln Val Lys Gln Ala
                       295
Cys Gly Val Val Leu Arg Lys Ile Phe Ser Ala Ser
                   310
```

<210> 1765 <211> 324 <212> PRT

<213> Mus musculus

<400> 1765

Met Ser Leu Phe Pro Gln Arg Asn Leu Asp Ala Met Asn Arg Ser Ala 10 Ala His Val Thr Glu Phe Val Leu Leu Gly Phe Pro Gly Ser Trp Lys 25 Ile Gln Ile Phe Leu Phe Val Leu Phe Leu Val Phe Tyr Val Leu Thr 40 Leu Leu Gly Asn Gly Ala Ile Ile Cys Ala Val Arg Cys Asp Ser Arg 55 Leu His Thr Pro Met Tyr Phe Leu Leu Gly Asn Phe Ser Phe Leu Glu 75 70 Ile Trp Tyr Val Ser Ser Thr Ile Pro Asn Ile Leu Ala Asn Ile Leu Ser Lys Thr Lys Ala Ile Ser Phe Ser Gly Cys Phe Leu Gln Phe Tyr 100 105 Phe Phe Ser Leu Gly Thr Thr Glu Cys Leu Phe Leu Ala Val Met 120 Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Arg Pro Leu His Tyr Pro Thr 135 140 Ile Met Thr Arg Arg Leu Cys Cys Ile Leu Val Ser Ser Cys Trp Leu 150 155 Ile Gly Phe Leu Gly Tyr Pro Ile Pro Ile Phe Ser Ile Ser Gln Leu 165 170 Pro Phe Cys Gly Ser Asn Ile Ile Asp His Phe Leu Cys Asp Met Asp 185 Pro Leu Met Ala Leu Ser Cys Ala Pro Ala Pro Ile Thr Glu Phe Ile 200 Phe Tyr Ala Gln Ser Ser Phe Val Leu Phe Phe Thr Ile Ala Tyr Ile 215 220 Leu Arg Ser Tyr Ile Leu Leu Arg Ala Val Phe Gln Val Pro Ser 235 Ala Ala Gly Arg Arg Lys Ala Phe Ser Thr Cys Gly Ser His Leu Val 245 250 Val Val Ser Leu Phe Tyr Gly Thr Val Met Val Met Tyr Val Ser Pro

Thr Tyr Gly Ile Pro Ile Leu Met Gln Lys Ile Leu Thr Leu Val Tyr 275

Ser Val Met Thr Pro Leu Phe Asn Pro Leu Ile Tyr Ser Leu Arg Asn 290

Lys Asp Met Lys Leu Ala Leu Arg Asn Val Leu Leu Gly Met Arg Ile 305

Val Lys Asn Met

<210> 1766 <211> 309 <212> PRT

<213> Mus musculus

<400> 1766

305

Met Lys Thr Leu Ser Ser Ser Asn Asn Thr Ile Thr Gly Phe Ile Leu Leu Gly Phe Pro Cys Pro Arg Glu Gly Gln Ile Leu Leu Phe Val Leu 25 Phe Phe Ile Val Tyr Leu Leu Thr Leu Met Gly Asn Ala Ser Ile Ile 40 Cys Ala Val Cys Cys Asp Gln Lys Leu His Ser Pro Met Tyr Leu Leu 55 Leu Ala Asn Phe Ser Phe Leu Glu Ile Trp Tyr Val Thr Ser Thr Val 70 75 Pro Asn Met Leu Ala Asn Phe Leu Ser Glu Asn Lys Val Ile Ser Phe 90 8.5 Ala Gly Cys Phe Leu Gln Phe Tyr Phe Phe Phe Ser Leu Gly Ser Thr 100 105 Glu Cys Phe Phe Leu Ala Val Met Ala Phe Asp Arg Tyr Leu Ala Ile 120 125 Cys Arg Pro Leu His Tyr Pro Ser Leu Met Thr Gly Arg Leu Cys Asn 135 140 Ile Leu Val Ile Ser Cys Trp Val Leu Gly Phe Leu Trp Phe Pro Val 150 155 Pro Ile Ile Ile Ser Gln Met Ser Phe Cys Gly Ser Arg Ile Ile 165 170 Asp His Phe Leu Cys Asp Pro Gly Pro Leu Leu Ala Leu Thr Cys Ser 180 185 190 Arg Ala Pro Leu Met Glu Phe Phe Trp Ala Ile Leu Ser Ser Met Leu 200 205 Leu Phe Ile Pro Phe Phe Cys Ile Met Gly Ser Tyr Ile Leu Val Leu 215 220 Arg Ala Val Phe Arg Val Pro Ser Arg Asp Gly Gln Lys Lys Ala Phe 230 235 Ser Thr Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr Gly Ser 245 250 Val Met Ile Met Tyr Leu Ser Pro Thr Ser Glu His Glu Ala Gly Met 265 Gln Lys Leu Val Thr Leu Phe Tyr Ser Val Val Thr Pro Leu Ile Asn 280 Pro Val Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Asn Ala Leu Gln 295 300 Lys Ile Leu Lys Thr

```
<211> 311
<212> PRT
<213> Mus musculus
<400> 1767
Met Lys Ala Phe Ser Ser Pro Ser Asn Ser Ser Ile Ile Thr Gly Phe
                                   10
Ile Leu Leu Gly Phe Pro Cys Pro Lys Glu Gly Gln Ile Leu Leu Phe
                                25
Val Leu Phe Phe Ile Ile Tyr Ile Leu Thr Leu Met Gly Asn Ala Ser
                           40
                                                45
Ile Ile Cys Ala Val Cys Tyr Asp Lys Lys Leu His Ser Pro Met Tyr
                       55
Leu Leu Leu Ala Asn Phe Ser Phe Leu Glu Ile Trp Tyr Val Thr Ser
                    70
                                        75
Thr Val Pro Asn Met Leu Ala Asn Phe Leu Ser Asp Thr Lys Val Ile
Ser Phe Ser Gly Cys Phe Leu Gln Phe Tyr Phe Phe Ser Leu Gly
           100
                                105
Ser Thr Glu Cys Phe Phe Leu Ala Val Met Ala Phe Asp Arg Tyr Leu
                           120
Ala Ile Cys Arg Pro Leu His Tyr Pro Ser Leu Met Thr Gly Arg Leu
                       135
                                            140
Cys Asn Ile Leu Val Ile Ser Cys Trp Met Leu Gly Phe Leu Trp Phe
                   150
                                       155
Pro Val Pro Ile Ile Ile Ser Gln Met Ser Phe Cys Gly Ser Arg
                                   170
               165
Ile Ile Asp His Phe Leu Cys Asp Pro Gly Pro Leu Leu Ala Leu Thr
                                185
Cys Val Arg Asn Ser Leu Ile Glu Met Thr Ser Ser Thr Leu Ser Ser
        195
                            200
Leu Leu Phe Val Pro Phe Phe Ile Met Gly Ser Tyr Ala Leu
                        215
                                            220
Val Met Arg Ala Val Leu Arg Val Pro Ser Ala Ala Gly Arg Arg Lys
                    230
                                        235
Ala Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Ser Leu Phe Tyr
                                    250
                245
Gly Ser Val Met Val Met Tyr Val Ser Pro Thr Ser Glu His Ala Ala
                                265
Gly Val Gln Lys Leu Val Thr Leu Phe Tyr Ser Val Val Thr Pro Leu
                           280
                                                285
Leu Asn Pro Val Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys His Ala
                       295
Met Lys Lys Leu Leu Lys Met
305
                    310
<210> 1768
<211> 311
<212> PRT
<213> Mus musculus
```

Met Lys Thr Phe Ser Ser Pro Ser Asn Ser Ser Thr Thr Thr Gly Phe

<210> 1767

<400> 1768

```
10
Ile Leu Leu Gly Phe Pro Cys Pro Arg Glu Gly Gln Ile Leu Leu Phe
                                25
Val Leu Phe Ser Ile Val Tyr Leu Leu Thr Leu Met Gly Asn Thr Cys
Ile Ile Phe Ala Val Cys Trp Asp Gln Arg Leu His Thr Pro Met Tyr
                        55
Leu Leu Leu Ala Asn Phe Ser Phe Leu Glu Ile Trp Tyr Val Thr Ser
Thr Val Pro Asn Met Leu Ala Asn Phe Leu Ser Asp Thr Lys Val Ile
               85
                                   90
Ser Phe Ser Gly Cys Phe Leu Gln Phe Tyr Phe Phe Phe Ser Leu Gly
                                105
Ser Thr Glu Cys Leu Phe Leu Ala Val Met Ala Phe Asp Arg Tyr Leu
                           120
                                                125
Ala Ile Cys Arg Pro Leu His Tyr Pro Ala Leu Met Thr Gly Ser Leu
                        135
Cys Asn Ile Leu Val Ile Ser Cys Trp Val Leu Gly Phe Leu Trp Phe
                    150
                                        155
Pro Val Pro Ile Ile Ile Ser Gln Met Ser Phe Cys Gly Ser Arg
                165
                                    170
Ile Ile Asp His Phe Leu Cys Asp Pro Gly Pro Leu Leu Ala Leu Thr
                                185
Cys Ser Arg Ala Pro Leu Met Glu Val Phe Trp Thr Ile Ile Thr Ser
                            200
                                                205
Leu Ile Leu Phe Val Pro Phe Leu Phe Ile Met Gly Ser Tyr Thr Leu
                        215
                                            220
Val Leu Arg Ala Val Phe Arg Val Pro Ser Arg Asp Gly Gln Lys Lys
                                        235
                   230
Ala Phe Ser Thr Cys Gly Ser His Leu Thr Val Val Leu Leu Phe Tyr
                                    250
Gly Ser Val Met Ile Met Tyr Leu Ser Pro Thr Ser Glu His Glu Ala
            260
                                265
Gly Met Gln Lys Leu Val Thr Leu Phe Tyr Ser Val Val Thr Pro Leu
                            280
Val Asn Pro Val Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys His Ala
                       295
Leu Gln Lys Ile Leu Arg Thr
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1769

 Met
 Thr
 Ser
 Ala
 Arg
 Asn
 Ala
 Ser
 His
 Thr
 Val
 Ser
 His
 Phe
 Ile
 Leu
 Leu
 10
 -- -- 15
 -- 15
 -- 15
 -- 15
 -- 15
 -- 15
 -- 15
 -- 15
 -- 15
 -- 15
 -- 15
 -- 15
 -- 16
 -- 15
 -- 16
 -- 15
 -- 16
 -- 16
 -- 16
 -- 30
 -- 30
 -- -- 30
 -- 30
 -- -- 30
 -- -- 30
 -- -- -- 40
 -- -- 45
 -- -- -- -- 45
 -- -- -- -- 60
 -- -- -- -- 60
 -- -- -- -- 60
 -- -- -- -- -- -- -- -- --

```
Pro Asn Met Leu Val Asn Phe Leu Ser Thr Thr Lys Thr Ile Ser Phe
               85
                                    90
Thr Arg Cys Leu Leu Gln Leu Tyr Phe Phe Phe Ser Leu Gly Thr Thr
           100
                               105
                                                    110
Glu Cys Leu Phe Leu Ser Ile Met Ala Tyr Asp Arg Phe Leu Ala Ile
                            120
Cys Arg Pro Leu His Tyr Pro Thr Val Met Thr Thr Met Phe Cys Gly
                       135
                                            140
Asn Leu Val Ile Phe Cys Trp Val Tyr Gly Phe Leu Trp Phe Leu Ile
                   150
                                        155
Pro Val Ile Leu Ile Thr Gln Leu Pro Phe Cys Gly Pro Asn Val Ile
               165
                                    170
Asp Asp Phe Leu Cys Asp Leu Gly Pro Leu Leu Ala Leu Ala Ser Val
           180
                               185
Cys Val Pro Ile Pro Gly Thr Val Leu Ile Cys Gly Thr Met Ser Ser
                           200
Leu Leu Ile Phe Gly Thr Phe Phe Tyr Ile Ile Gly Ser Tyr Thr Leu
                        215
Val Leu Arg Ala Val Ile Arg Met Pro Ser Ser Ala Gly Ser Lys
                   230
                                        235
Ala Phe Ser Thr Cys Ser Ser His Leu Ala Val Val Phe Leu Phe Tyr
               245
                                    250
Gly Ser Val Met Ile Thr Tyr Val Ser Pro Gly Ser Gly Gln Ala Lys
                               265
Gly Met Gln Lys Phe Thr Thr Leu Phe Tyr Ser Val Met Thr Pro Phe
       275
                           280
                                               285
Phe Asn Pro Met Ile Tyr Ser Leu Arg Asn Lys Glu Met Lys Asp Ala
                       295
Leu Lys Lys Val Val Gly Gly Ser
```

<210> 1770 <211> 308

<212> PRT

<213> Mus musculus

<400> 1770

Met Glu Thr Glu Asn Arg Thr Val Val Thr Glu Phe Ile Leu Ile Gly 10 Leu Thr Gln Ser His Asp Ile Gln Arg Leu Val Phe Val Leu Ser Leu 25 Ile Phe Tyr Ile Ile Ile Leu Pro Gly Asn Ile Leu Ile Ile Leu Thr 40 Ile Arg Ser Asp Pro Gly Leu Thr Ala Pro Leu Tyr Phe Phe Leu Gly 55 60 Asn Leu Ala Phe Leu Asp Ala Ser Tyr Ser Phe Ile Val Ala Pro Arg 70 75 Met Leu Val Asp Phe Phe Ser Glu Lys Lys Ile Ile Ser Tyr Lys Ala 8.5 90 Cys Ile Thr Gln Leu Phe Phe Leu His Phe Leu Gly Gly Glu Gly 105 Leu Leu Val Val Met Ala Phe Asp Arg Tyr Ile Ala Ile Cys Arg 115 120 125 Pro Leu His Tyr Ser Thr Val Met Ser Pro Arg Ala Cys Tyr Val Met 135 140 Leu Leu Ala Leu Trp Leu Gly Gly Phe Ile His Ser Ile Ile Gln Val

145 150 155 Val Leu Ile Leu Arg Leu Pro Phe Cys Gly Pro Asn His Leu Asp Asn 165 170 Phe Phe Cys Asp Val Pro Gln Val Ile Lys Leu Ala Cys Thr Asp Thr 185 Phe Ala Val Glu Leu Leu Met Ile Phe Asn Ser Gly Leu Leu Thr Leu 200 Leu Cys Phe Leu Gly Leu Leu Thr Ser Tyr Ala Val Ile Leu Cys His 215 220 Val His Arg Ser Ala Ser Glu Gly Lys Asn Lys Ala Ile Ser Thr Cys 230 235 Thr Thr His Val Ile Ile Ile Phe Ile Met Phe Gly Pro Ala Ile Phe 245 250 Ile Tyr Thr Arg Pro Phe Thr Ala Leu Ser Ala Asp Lys Val Val Ser 260 265 270 Phe Phe His Thr Val Ile Phe Pro Leu Met Asn Pro Val Ile Tyr Thr 280 285 Leu Arg Asn Gln Glu Val Lys Thr Ser Met Lys Lys Leu Ile Ile Arg 295 His Ile Ile Cys 305

<210> 1771 <211> 313 <212> PRT

<213> Mus musculus

<400> 1771

Met Glu Pro Ala Asn Asp Thr Thr Val Thr Glu Phe Ile Leu Thr Gly 10 Leu Ser Gln Thr Arg Glu Val Gln Leu Val Leu Phe Val Ile Phe Leu 25 Ser Phe Tyr Leu Phe Ile Leu Pro Val Asn Ile Leu Ile Ile Cys Thr 40 Ile Arg Leu Asp Ser His Leu Ser Ser Pro Met Tyr Phe Leu Leu Ala 55 Asn Leu Ala Phe Leu Asp Ile Trp Tyr Ser Ser Ile Thr Ala Pro Lys 70 75 Met Leu Val Asp Phe Phe Val Glu Arg Lys Ile Ile Ser Phe Gly Gly 85 90 Cys Ile Ala Gln Leu Phe Phe Leu His Phe Val Gly Ala Ser Glu Met 105 Phe Leu Leu Thr Val Met Ala Phe Asp Arg Tyr Ala Ala Ile Cys Arg 115 120 125 Pro Leu His Tyr Ala Thr Ile Met Asn Arg Arg Leu Cys Cys Ile Leu 135 Val Ala Leu Ser Trp Thr Gly Gly Phe Val His Ser Ile Ile Gln Val 150 155 Ala Leu Ile Val Arg Leu Pro Phe Cys Gly Pro Asn Glu Leu Asp Asn 170 175 165 Tyr Phe Cys Asp Ile Thr Gln Val Val Arg Ile Ala Cys Ala Asn Thr 185 Phe Leu Glu Glu Met Val Met Ile Phe Ser Ser Gly Leu Ile Ser Val 200 205 Val Cys Phe Ile Ala Leu Leu Met Ser Tyr Ala Phe Leu Leu Thr Met 215 220

```
      Leu Lys
      Lys
      Lys
      His
      Ser
      Ser
      Ser
      Gly
      Glu
      Ser
      Thr
      Ser
      Arg
      Ala
      Ile
      Ser
      240

      Thr
      Cys
      Tyr
      Ser
      His
      Ile
      Thr
      Ile
      Val
      Leu
      Met
      Phe
      Gly
      Pro
      Ser
      Ser
      250
      255
      Leu
      Asp
      Lys
      Val
      Lys
      Val
      Ser
      Phe
      Ser
      Phe
      Ser
      Leu
      Asp
      Lys
      Val
      Lys
      Phe
      Pro
      Leu
      Asp
      Pro
      Ile
      <
```

<210> 1772 <211> 308 <212> PRT <213> Mus musculus

<400> 1772

Met Glu Thr Glu Asn Arg Thr Val Val Thr Glu Phe Ile Phe Thr Gly Leu Thr Glu Ser Leu Asp Ile Gln Arg Leu Val Phe Val Leu Ser Leu 25 Ile Phe Tyr Ile Ile Ile Leu Pro Gly Asn Val Phe Ile Ile Leu Thr 40 Ile Ile Ser Asp Pro Gly Leu Thr Ala Pro Leu Tyr Leu Phe Leu Gly 55 Asn Leu Ala Phe Leu Asp Ala Ser Tyr Ser Phe Ile Val Ala Pro Arg 70 75 Met Leu Ile Asp Ile Phe Ser Glu Lys Lys Ile Ile Ser Tyr Lys Ala 85 90 Cys Ile Thr Gln Leu Phe Phe Leu His Phe Leu Gly Gly Glu Phe 100 105 Leu Leu Val Val Met Ala Phe Asp Arg Tyr Ile Ala Ile Cys Arg 120 Pro Leu Tyr Tyr Ser Thr Val Met Asn Pro Arg Val Cys Tyr Val Met 135 140 Leu Leu Ala Pro Trp Leu Gly Gly Phe Ile His Ser Ile Ile Gln Val 150 155 Val Leu Ile Leu Arg Leu Pro Phe Cys Gly Pro Asn His Leu Asp Asn 165 170 Phe Phe Cys Asp Val Pro Gln Val Ile Lys Leu Ala Cys Thr Asp Thr 180 185 190 Phe Ala Val Glu Leu Leu Met Ile Phe Asn Ser Gly Leu Leu Thr Leu 200 195 205 Val Cys Phe Leu Gly Leu Leu Thr Ser Tyr Ala Val Ile Leu Cys His 215 220 Val His Arg Ser Ala Ser Glu Gly Lys Asn Lys Ala Ile Ser Thr Cys 230 235 Thr Thr His Val Ile Ile Ile Phe Leu Met Phe Gly Pro Ala Ile Phe 245 250 Ile Tyr Thr Arg Pro Phe Thr Ala Leu Ser Ala Asp Lys Val Val Ser 265 Phe Phe His Thr Val Ile Phe Pro Leu Leu Asn Pro Val Ile Tyr Thr 280 285 Leu Arg Asn Gln Glu Val Lys Thr Ser Met Lys Lys Leu Phe Ile Arg

Gln Val Ile Cys 305

<210> 1773

<211> 312

<212> PRT

<213> Mus musculus

<400> 1773

Met Asn Asn His Ser Ser Ser Ser Ser Ser Thr Ser Asp Phe Ile Leu 10 Leu Gly Leu Ser Thr Asn Pro Trp Met Gln Lys Pro Leu Phe Gly Ile 25 Phe Ile Ile Met Tyr Leu Val Thr Val Met Gly Asn Val Leu Ile Ile 40 Leu Val Ile Arg Ser Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe 55 Leu Ser Asn Leu Ser Phe Met Asp Ile Cys Phe Thr Thr Val Ile Val 75 Pro Lys Met Leu Val Asn Phe Leu Ser Glu Thr Lys Thr Ile Ser Tyr 90 8.5 Val Gly Cys Leu Val Gln Met Tyr Phe Phe Met Ala Leu Gly Asn Thr 105 Asp Ser Tyr Leu Leu Ala Ser Met Ala Ile Asp Arg Leu Val Ala Ile 115 120 Cys Asn Pro Leu His Tyr Asp Val Val Met Arg Pro Gln Arg Cys Leu 135 140 Leu Met Leu Gly Ser Cys Thr Ile Ser His Leu His Ala Leu Phe 150 155 160 Arg Val Leu Leu Met Ser Arg Leu Ser Phe Cys Ala Ser His Val Ile 170 165 Lys His Phe Phe Cys Asp Thr Gln Pro Val Leu Lys Leu Ser Cys Ser 185 Asp Thr Ser Ser Gln Ile Val Val Met Thr Glu Thr Leu Ala Val 200 Ile Val Thr Pro Phe Leu Cys Ile Leu Phe Ser Tyr Met Arg Ile Ile 215 Val Thr Val Leu Arg Ile Pro Ser Ala Ala Gly Lys Trp Lys Ala Phe 230 235 Ser Thr Cys Gly Ser His Leu Thr Val Val Val Leu Phe Tyr Gly Ser 245 250 Ile Ile Tyr Val Tyr Phe Arg Pro Leu Ser Met Tyr Ser Val Val Lys 265 260 Asp Arg Val Ala Thr Val Met Tyr Thr Val Val Thr Pro Met Met Asn 280 Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Arg Gly Leu Arg 295 Lys Leu Met Gly Lys Val His Leu

310

<210> 1774

<211> 318

<212> PRT

<213> Mus musculus

```
Met Asp Gly Ser Thr Leu Gln Ser Pro Gln Gln Asn His Ser Thr Phe
Val Ala Phe Ile Leu Leu Gly Phe Ser Asp Val Pro Asn Leu Gln Glu
Phe Leu Phe Gly Leu Phe Leu Met Val Tyr Leu Ile Ile Leu Met Gly
                            40
Asn Ser Leu Ile Ile Ile Ile Arg Ala Asp Pro Ser Leu Gln Thr
Pro Met Tyr Phe Phe Leu Gly Asn Phe Ser Phe Leu Glu Met Cys Tyr
                   70
                                        75
Val Ser Val Thr Leu Pro Arg Leu Leu Thr Asp Leu Tyr Arg Gln Asp
               85
                                    90
Arg Ile Ile Ser Phe Met Ala Cys Ala Thr Gln Met Tyr Phe Phe Leu
           100
                               105
Ile Phe Gly Ala Thr Glu Cys Phe Ile Leu Thr Ala Met Ala Tyr Asp
                            120
Arg Tyr Val Ala Ile Cys Asn Pro Leu Leu Tyr Pro Leu Ile Met Asn
                        135
Asn Ser Leu Cys Ile Gln Leu Ala Ala Gly Cys Trp Ile Ser Gly Val
                   150
                                        155
Pro Val His Ile Gly Phe Thr Tyr Trp Ile Phe Ser Leu Pro Phe Cys
               165
                                    170
Gly Ser Asn Gln Leu Asn His Phe Phe Cys Asp Ile Pro Pro Val Leu
                                185
                                                    190
Thr Leu Ala Cys Gly Asp Thr Phe Met Ile Glu Met Leu Ile Tyr Val
                            200
Ile Ala Leu Leu Val Val Thr Ile Pro Phe Met Leu Ile Leu Ala Ser
                       215
                                            220
Tyr Val Lys Ile Ile Ser Ser Ile Leu Lys Leu Pro Ser Ala Thr Gly
                   230
                                       235
Arg Ala Lys Ala Phe Ser Thr Cys Ser Ser His Leu Ile Val Val Ala
                                    250
Leu Phe Phe Gly Ser Gly Ile Ile Thr Tyr Leu Arg Pro Lys Ser Ser
                                265
His Ser Ala Gly Val Asp Lys Phe Leu Ser Leu Phe Tyr Thr Val Val
                            280
                                               285
Thr Pro Met Phe Asn Pro Met Ile Tyr Cys Leu Arg Asn Lys Asp Val
                       295
                                            300
Met Ile Ala Leu Lys Lys Ile Phe Leu Arg Cys Phe Met Leu
                    310
<210> 1775
<211> 310
<212> PRT
<213> Mus musculus
<400> 1775
Met Asp Glu Gly Asn Cys Ser Ser Asn Thr Glu Phe Val Leu Leu Gly
                                    10
Ile Thr Asn Asn Pro Ser Met Lys Val Gly Leu Phe Ile Val Phe Leu
```

20 25 30

Ile Ile Tyr Leu Ile Ile Leu Val Ala Asn Ile Gly Met Ile Val Leu
35 40 45

Ile Lys Leu Asp Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser

<400> 1774

```
50
                       55
His Leu Ser Phe Ser Asp Leu Cys Tyr Ser Thr Ala Val Gly Pro Lys
                  70
                                      75
Met Leu Val Asp Leu Met Val Lys Gln Lys Ile Ile Pro Phe Val Gly
                                   90
               85
Cys Ala Leu Gln Phe Phe Phe Thr Cys Ile Phe Val Asp Ala Glu Cys
       . 100
                               105
Met Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Lys Ala Ile Ser Asn
                          120
Pro Leu Met Tyr Val Val Gly Met Ser Ser Lys Phe Cys Tyr Gln Leu
                      135
                                          140
Leu Ala Gly Val Tyr Leu Val Gly Met Ile Asp Thr Val Ile His Thr
                   150
                                      155
Ile Met Thr Phe Gly Leu Cys Phe Tyr Gly Ser Asn Glu Ile Asn His
                                  170
               165
Phe Phe Cys Asp Ile Pro Pro Ile Leu Leu Ser Cys Ser Asp Thr
                              185
Gln Thr Asn Glu Leu Ile Thr Phe Val Ile Phe Gly Phe Ile Glu Leu
                           200
                                               205
Ser Thr Ile Ser Gly Val Leu Val Ser Tyr Cys Tyr Ile Ile Ser Ser
                       215
Val Leu Lys Ile Arg Ser Thr Asp Gly Arg Phe Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ala Ser His Leu Thr Ala Val Ala Ile Phe Gln Gly Thr Leu Leu
               245
                                   250
Phe Met Tyr Phe Arg Pro Ala Ser Ala Tyr Ser Leu Asp Gln Asp Lys
           260
                               265
Ile Thr Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                           280
       275
                                              285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Gln Glu Ala Leu Gln Lys Leu
   290 295
Lys Lys Lys Ile Phe Phe
305
```

<210> 1776 <211> 310 <212> PRT

<213> Mus musculus

<400> 1776

Met Asp Lys Arg Asn Cys Ser Ser Val Pro Glu Phe Leu Leu Gly 10 Ile Thr Asn Lys Pro Glu Met Lys Val Ala Leu Phe Ile Val Phe Leu 20 25 Ile Val Tyr Leu Thr Ile Leu Leu Thr Asn Val Gly Met Ile Thr Leu Ile Arg Met Asp Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 His Leu Ser Phe Ser Asp Leu Cys Tyr Ser Thr Ala Val Gly Pro Lys 70 75 Met Leu Leu Asp Leu Leu Glu Asp Asn Asn Pro Ile Ser Phe Val Gly Cys Phe Leu Gln Leu Leu Ile Val Ser Ile Phe Ile Asp Val Glu Cys 100 105 Met Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Lys Ala Ile Ser Asn 115 120

```
Pro Leu Met Tyr Ala Val Asp Met Ser Ser Arg Val Cys Tyr Gln Phe
                       135
                                           140
Leu Thr Ala Ile Tyr Val Phe Gly Thr Ile Asp Gly Phe Ile His Thr
                   150
                                       155
Ser Leu Ala Phe Ser Leu Cys Phe Cys His Ser Thr Gln Ile Asn His
                                   170
Phe Phe Cys Asp Leu Pro Pro Val Leu Leu Ser Cys Ser Asp Thr
           180
                               185
His Ile Asn Glu Leu Val Leu Phe Met Leu Phe Gly Phe Ile Glu Leu
                           200
Ser Thr Ile Ser Gly Val Leu Val Ser Tyr Cys Tyr Ile Ile Ser Ser
                       215
                                           220
Val Leu Lys Ile Ser Ser Thr Gly Gly Trp Phe Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ala Ser His Leu Thr Ala Val Gly Ile Phe Gln Gly Thr Met Leu
               245
                                   250
Phe Met Tyr Phe Arg Pro Ser Ser Ala Tyr Ser Leu Asp Gln Asp Lys
                               265
Met Thr Ser Ile Phe Tyr Leu Leu Val Ile Pro Met Ile Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Val Arg Leu
                       295
Arg Ser Lys Trp Trp Phe
```

<211> 309

<212> PRT

<213> Mus musculus

<400> 1777

Met Asp Ile Gly Asn Cys Ser Leu Asn Glu Phe Ile Phe Val Gly Val 10 Thr Asn Asn Pro Glu Met Lys Gly Thr Leu Phe Thr Ile Phe Leu Leu Ile Tyr Leu Ile Asn Leu Leu Gly Asn Ile Gly Met Ile Ile Leu Ile 40 Arg Met Asp Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser His 55 Leu Ser Phe Cys Asp Leu Cys Tyr Ser Thr Ala Ile Gly Pro Lys Met 70 75 Leu Leu Asp Met Phe Gly Lys Asn Lys Ser Ile Pro Phe Trp Gly Cys 85 90 Ala Leu Gln Leu Phe Ile Phe Cys Val Phe Ala Asp Ser Glu Cys Val 100 105 Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Gln Ala Ile Ser Asn Pro 120 125 Leu Leu Tyr Thr Ala Asn Met Ser Ser Arg Lys Cys Phe Met Phe Met 135 Ala Gly Val Tyr Leu Val Gly Thr Ala Asp Ala Leu Ile His Thr Thr 150 155 Leu Ala Phe Arg Leu Cys Phe Cys Gly Ser Asn Glu Ile Asn His Phe 170 Phe Cys Asp Leu Pro Pro Leu Tyr Leu Leu Ser Cys Ser Asp Thr Gln 180 185 Val Asn Tyr Leu Ala Leu Phe Thr Ile Tyr Gly Phe Leu Glu Leu Ser

195 200 Thr Ile Ser Gly Val Leu Val Ser Tyr Cys Tyr Ile Ile Ser Ser Ile 215 220 Leu Lys Ile Arg Ser Ala Glu Gly Arg Phe Lys Ala Phe Ser Thr Cys 230 235 Thr Ser His Leu Thr Ala Val Ala Ile Phe Gln Gly Thr Leu Leu Phe 250 Thr Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Leu Asp Gln Asp Lys Met 265 Thr Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu Ile 280 Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Lys Lys Ile Lys 295 Arg Lys Arg Trp Phe 305

<210> 1778 <211> 307

<212> PRT

<213> Mus musculus

<400> 1778

Met Asn Ile Gly Asn Cys Ser Leu Asn Glu Phe Ile Phe Val Gly Val 10 Thr Asn Asn Pro Glu Met Lys Gly Thr Leu Phe Thr Ile Phe Leu Leu 25 Ile Tyr Leu Ile Asn Leu Leu Gly Asn Ile Gly Met Ile Ile Leu Ile 40 Arg Met Asp Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser His 55 60 Leu Ser Phe Cys Asp Leu Cys Tyr Ser Thr Ala Ile Gly Pro Lys Met 70 75 Leu Val Asp Met Phe Gly Lys Asn Lys Ser Ile Pro Phe Trp Gly Cys 90 Ala Val Gln Phe Phe Ile Ser Cys Thr Phe Ala Asp Ser Glu Cys Val 105 100 Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Gln Ala Ile Ser Asn Pro 120 125 Leu Leu Tyr Thr Ala Asn Met Ser Ser Arg Lys Cys Phe Met Phe Met 135 140 Ala Gly Val Tyr Leu Val Gly Thr Ser Asp Ala Leu Ile His Thr Thr 150 155 Leu Ala Phe Arg Leu Cys Phe Cys Gly Ser Asn Glu Ile Asn His Phe 165 170 Phe Cys Asp Leu Pro Pro Leu Tyr Leu Leu Ser Cys Ser Asp Thr Gln 185 Val Asn Tyr Leu Ala Leu Phe Thr Ile Tyr Gly Phe Leu Glu Leu Ser 195 200 Thr Ile Ser Gly Val Leu Val Ser Tyr Cys Tyr Ile Ile Ser Ser Val 215 220 Leu Lys Ile Arg Ser Ala Glu Gly Arg Phe Lys Ala Phe Ser Thr Cys 230 235 Thr Ser His Leu Thr Ala Val Ala Ile Phe Gln Gly Thr Leu Leu Phe 245 250 Thr Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Leu Asp Gln Asp Lys Met 260 265 270

Thr Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu Ile 275 280 285

Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Gly Lys Met Lys 290 295 300

Arg Lys Arg 305

<210> 1779 <211> 310 <212> PRT <213> Mus musculus

<400> 1779

Met Arg Ala Asn Gln Thr Trp Ile Thr Glu Val Thr Leu Leu Gly Phe 10 Gln Ala Asp Leu Ser Val Glu Cys Phe Leu Phe Gly Leu Phe Ser Leu 25 Phe Tyr Ser Phe Thr Leu Leu Gly Asn Gly Ile Ile Leu Val Val Ile Cys Leu Asp Asn Arg Leu His Ile Pro Met Tyr Phe Phe Leu Ser His 55 Leu Ala Ile Val Asp Met Ser Tyr Ala Ser Asn Asn Val Pro Lys Met 70 Leu Ala Asn Leu Val Thr Gln Arg Arg Thr Ile Ser Phe Ile Leu Cys 85 90 Ile Met Gln Thr Phe Leu Tyr Leu Ala Phe Ala Cys Thr Glu Cys Leu 105 Ile Leu Val Val Met Ser Tyr Asp Arg Phe Val Ala Ile Cys His Pro 115 120 125 Leu His Tyr Thr Val Ile Met Ser Trp Lys Val Cys Thr Ile Leu Ala 135 Ala Val Ser Trp Ile Ala Gly Phe Leu Leu Ala Leu Val His Leu Val 150 155 Leu Ile Leu Lys Leu Pro Phe Cys Gly Pro His Glu Ile Asn His Phe 165 170 Phe Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Thr 180 185 Leu Asn Gln Val Val Ile Leu Ala Ala Cys Val Phe Ile Leu Val Gly 200 205 Pro Leu Cys Leu Val Leu Val Ser Tyr Thr Arg Ile Leu Val Thr Ile 215 220 Leu Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys 230 235 Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile Val 245 250 Met Tyr Met Ala Pro Lys Ser Gln His Pro Glu Leu Gln Gln Lys Ile 265 Leu Ser Leu Phe Tyr Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile 280 Tyr Cys Leu Arg Asn Ala Glu Val Lys Gly Ala Leu Arg Arg Ser Leu 295 Trp Lys Glu Arg Pro Met 310

```
<213> Mus musculus
<400> 1780
Met Arg Ala Asn Gln Thr Trp Ile Thr Glu Val Thr Leu Leu Gly Phe
                                    10
Gln Ala Asp Leu Ala Val Glu Cys Phe Leu Phe Gly Leu Phe Ser Leu
                                25
Phe Tyr Ser Phe Thr Leu Leu Gly Asn Gly Ile Ile Leu Val Val Ile
                            40
Cys Leu Asp Asn Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser His
                        55
Leu Ala Ile Val Asp Met Ser Tyr Ala Ser Asn Asn Val Pro Lys Met
                    70
                                        75
Leu Ala Asn Leu Val Thr Gln Arg Arg Thr Ile Ser Phe Ile Pro Cys
                                    90
Ile Met Gln Thr Phe Leu Tyr Leu Ala Phe Ala Ser Ile Glu Cys Leu
            100
                                105
Ile Leu Val Val Met Ser Tyr Asp Arg Phe Val Ala Ile Cys His Pro
                            120
Leu His Tyr Thr Val Ile Met Ser Trp Arg Val Cys Thr Ile Met Ala
                       135
                                           140
Ala Val Ser Trp Ile Val Gly Phe Leu Leu Ala Leu Val His Leu Ile
                   150
                                        155
Leu Ile Leu Arg Leu Pro Phe Cys Gly Pro His Lys Val Asn His Phe
               165
                                    170
Phe Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Thr
           180
                                185
Leu Asn Gln Val Val Ile Phe Ala Ala Cys Val Phe Ile Leu Val Gly
                            200
                                                205
Pro Leu Cys Met Val Leu Val Ser Tyr Thr Arg Ile Leu Val Ala Ile
                        215
                                            220
Leu Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile Val
                245
                                    250
Met Tyr Met Ala Pro Lys Ser Gln His Pro Glu Met Gln Gln Lys Ile
                               265
Leu Ser Leu Phe Tyr Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile
        275
                            280
                                                285
Tyr Cys Leu Arg Asn Ala Glu Val Lys Gly Ala Leu Arg Arg Ser Leu
                        295
Leu Lys Glu Arg Ser Met
305
<210> 1781
<211> 310
<212> PRT
<213> Mus musculus
<400> 1781
Met Lys Ala Asn Gln Thr Trp Ile Thr Glu Val Thr Leu Leu Gly Phe
                                    10
Gln Ala Asp Leu Ala Val Glu Cys Phe Leu Phe Gly Leu Phe Ser Leu
            20
                                25
```

<211> 310 <212> PRT

```
Phe Tyr Ser Phe Thr Leu Leu Gly Asn Gly Ile Ile Phe Gly Ile Ile
                            4 0
Cys Leu Asp His Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser His
Leu Ala Ile Val Asp Met Ser Tyr Ala Ser Asn Asn Val Pro Lys Met
Leu Ala Asn Leu Val Thr Gln Arg Arg Thr Ile Ser Phe Ile Pro Cys
                                    90
Leu Met Gln Thr Phe Leu Tyr Leu Ala Phe Ala His Ile Glu Cys Leu
                               105
Ile Leu Val Val Met Ser Tyr Asp Arg Phe Val Ala Ile Cys His Pro
                            120
Leu His Tyr Thr Val Ile Met Ser Trp Arg Val Cys Thr Ile Leu Ala
                       135
                                            140
Ala Val Ser Trp Ile Phe Ser Phe Leu Leu Ala Leu Val His Leu Val
                   150
                                       155
Leu Ile Leu Arg Leu Pro Phe Cys Gly Pro His Glu Val Asn His Phe
                165
                                    170
Phe Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Thr
                                185
Leu Asn Gln Val Val Ile Phe Ala Ala Cys Val Phe Ile Leu Val Gly
                            200
                                                205
Pro Leu Cys Leu Val Leu Val Ser Tyr Thr Arg Ile Leu Val Ala Ile
                       215
Leu Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys
                   230
                                        235
Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile Val
                                    250
Met Tyr Met Ala Pro Lys Ser Gln His Pro Glu Leu Gln Gln Lys Ile
                               265
           260
Leu Ser Leu Phe Tyr Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile
                            280
Tyr Ser Leu Arg Asn Ala Glu Val Lys Gly Ala Leu Arg Arg Ser Leu
                        295
Leu Lys Glu Arg Ser Met
305
```

<211> 313

<212> PRT

<213> Mus musculus

<400> 1782

 Met
 Lys
 Glu
 Asn
 Gln
 Thr
 Met
 Val
 Thr
 Glu
 Phe
 Ile
 Leu
 Gly
 Phe
 Ile
 Leu
 Gly
 Phe
 Ile
 Leu
 Gly
 Phe
 Ala
 Leu
 Phe
 Ser
 Val

 Cys
 Tyr
 Ile
 Phe
 Thr
 Leu
 Leu
 Gly
 Asn
 Gly
 Phe
 Thr
 Leu
 Ile
 Asn
 Gly
 Phe
 Phe
 Phe
 Leu
 Ile
 Asn
 Asn
 Gly
 Ile
 Asn
 Gly
 Ile
 Asn
 Gly
 Ile
 Asn
 Thr
 Ile
 Ile
 Ile
 Asn
 Ile
 Ile
 Ile
 Ile
 Ile
 Ile
 Ile

Met Met Gln Thr Tyr Leu Phe Leu Thr Phe Gly Ser Thr Glu Cys Val

```
100
                               105
Leu Leu Val Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His Pro
                           120
Leu His Tyr Thr Val Ile Met Asn Trp Arg Val Cys Thr Ile Met Ala
                                            140
                        135
Ala Val Ser Trp Ile Phe Ser Phe Leu Leu Ala Leu Val His Leu Val
                   150
                                        155
Leu Ile Leu Arg Leu Pro Phe Cys Gly Pro His Glu Val Asn His Phe
               165
                                   170
Phe Cys Glu Ile Leu Ser Val Leu Lys Leu Ala Cys Ala Asp Thr Thr
                               185
           180
Leu Asn Gln Val Val Ile Phe Ala Ala Cys Val Phe Ala Leu Val Gly
                           200
Pro Leu Cys Leu Val Leu Val Ser Tyr Thr Arg Ile Leu Val Thr Ile
                       215
                                            220
Leu Arg Ile Gln Ser Gly Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys
                                        235
                   230
Ser Ser His Leu Cys Val Val Gly Leu Phe Phe Gly Ser Ala Ile Val
                245
                                    250
Met Tyr Ile Ala Pro Lys Ser Gln His Pro Glu Glu Leu Gln Lys Ile
            260
                                265
Leu Phe Leu Phe Tyr Ser Phe Phe Asn Pro Met Leu Asn Pro Leu Ile
                           280
                                               285
Tyr Ser Leu Arg Asn Ala Glu Val Lys Gly Ala Leu Arg Arg Ser Leu
                       295
Cys Asn Glu Asn His Ser Gln Leu Val
                    310
```

<211> 310

<212> PRT

<213> Mus musculus

<400> 1783

Met Gly Asn Asn Met Thr Leu Ile Thr Glu Phe Ile Leu Leu Gly Phe 10 Pro Leu Ser Pro Arg Met Gln Met Leu Leu Phe Ala Leu Phe Ser Leu 25 Phe Tyr Ala Phe Thr Leu Leu Gly Asn Gly Thr Ile Val Gly Leu Ile 40 Cys Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser His 55 Leu Ala Ile Val Asp Ile Ala Tyr Ala Cys Asn Thr Val Pro Gln Met 70 75 Leu Val Asn Leu Leu Asp Pro Val Lys Pro Ile Ser Tyr Ala Gly Cys 8.5 Met Thr Gln Thr Phe Leu Phe Leu Thr Phe Ala Ile Thr Glu Cys Leu Leu Leu Val Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His Pro 120 125 Leu Arg Tyr Ser Ala Ile Met Ser Trp Arg Val Cys Ser Thr Met Ala 135 140 Val Thr Ser Trp Ile Ile Gly Val Leu Leu Ser Leu Ile His Leu Val 150 155 Leu Leu Pro Leu Pro Phe Cys Val Ser Gln Lys Val Asn His Phe 165 170

```
Phe Cys Glu Ile Thr Ala Ile Leu Lys Leu Ala Cys Ala Asp Thr His
                               185
           180
Leu Asn Glu Thr Met Val Leu Ala Gly Ala Val Ser Val Leu Val Gly
                           200
Pro Phe Ser Ser Ile Val Val Ser Tyr Ala Cys Ile Leu Gly Ala Ile
                       215
Leu Lys Ile Gln Ser Glu Glu Gly Gln Arg Lys Ala Phe Ser Thr Cys
                    230
                                        235
Ser Ser His Leu Cys Val Val Gly Leu Phe Tyr Gly Thr Ala Ile Val
                                    250
Met Tyr Val Gly Pro Arg His Gly Ser Pro Lys Glu Gln Lys Lys Tyr
                                265
           260
Leu Leu Phe His Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile
                           280
                                                285
Tyr Ser Leu Arg Asn Ser Asp Val Lys Asn Thr Leu Lys Arg Val Leu
                       295
                                            300
Arg Thr Gln Arg Ala Leu
```

<210> 1784 <211> 310

<212> PRT

<213> Mus musculus

<400> 1784

Met Met Arg Arg Asn His Thr Val Ile Ser Glu Phe Val Phe Gln Gly Phe Ser Ser Phe Gln Glu Tyr Lys Phe Thr Leu Phe Met Val Phe Leu 25 Thr Leu Tyr Leu Leu Thr Leu Thr Gly Asn Ala Ile Ile Met Ile Ile Ile Gly Ile Asp Arg His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Met Leu Ser Thr Ser Glu Thr Val Tyr Thr Leu Val Ile Val Pro Arg Met Leu Ala Ser Leu Val Gly Ser Ser Gln Ser Ile Ser Leu Ala Gly 85 90 Cys Ala Thr Gln Met Phe Phe Phe Ile Thr Leu Ala Ile Asn Asn Cys 105 Phe Leu Leu Thr Ala Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys Asn 115 120 Pro Leu Arg Tyr Ser Val Ile Met Asn Lys Arg Val Cys Ala Gln Leu 135 140 Val Trp Gly Ser Cys Asn Ile Gly Leu Leu Val Ala Ile Ile Gln Ile 150 155 Ala Ser Val Phe Arg Ala Pro Phe Cys Asp Arg Glu Val Ala His Tyr 165 170 Phe Cys Asp Ile Arg Pro Val Met Lys Leu Ser Cys Ala Asp Thr Thr 185 190 Leu His Asp Ile Val Asn Phe Ile Ile Ser Ser Leu Val Ile Val Val 200 205 Pro Met Gly Leu Val Phe Ile Ser Tyr Ile Leu Ile Ile Ser Thr Ile 215 220 Leu Lys Ile Ala Ser Ala Glu Gly Arg Lys Lys Ala Phe Ala Thr Cys 230 235 Ala Ser His Leu Thr Val Val Ile Ile His Tyr Gly Cys Ala Ser Ile

```
245
                                    250
Ala Tyr Leu Lys Pro Lys Ser Glu Asn Thr Arg Asp Gln Asp Gln Leu
           260
                               265
Ile Ser Val Thr Tyr Thr Val Phe Thr Pro Leu Leu Asn Pro Val Val
                           280
Tyr Thr Leu Arg Asn Lys Glu Val Lys Asp Ala Ile Tyr Arg Ala Ile
                       295
Gly Lys Lys Pro Leu Ala
<210> 1785
<211> 316
<212> PRT
<213> Mus musculus
<400> 1785
Met Ala Tyr Glu Val Met Asn Gln Thr Ser Ala Thr Thr Phe Ile Leu
Val Gly Phe Ser Glu Tyr Pro Gln Leu Gln Lys Pro Leu Phe Leu Leu
                                25
Phe Leu Ala Ile Tyr Ser Val Thr Leu Val Gly Asn Leu Gly Ile Leu
                            40
Val Val Ile Lys Val Asn Pro Lys Leu His Thr Pro Met Tyr Phe Phe
                        55
Leu Ser His Leu Ser Phe Leu Asp Ile Cys Tyr Ser Ser Val Phe Thr
                                       75
                    70
Pro Lys Leu Gln Ile Leu Ile Met Glu Asp Arg Thr Val Ser Phe
                                   90
               8.5
Lys Ala Cys Met Val Gln Phe Phe Ile Cys Thr Phe Val Ile Thr
           100
                               105
Glu Met Phe Met Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val
                            120
                                               125
Cys Asn Pro Leu Leu Tyr Thr Val Val Met Pro Phe Gln Phe Cys Ala
                        135
Leu Leu Val Ala Gly Thr Tyr Met Ile Gly Gly Leu Cys Thr Val Ile
                   150
                                       155
Leu Leu Tyr Thr Leu Leu Gln Leu Ser Tyr Cys Glu Tyr Gly Ile Ile
                                   170
Asn His Phe Gly Cys Glu Tyr Ser Ala Val Ile Ser Val Ser Cys Ser
           180
                               185
                                                    190
Asp Ser Ser Phe Ser Gln Leu Thr Ser Leu Val Ile Ala Ile Val Ser
       195
                            200
                                               205
Glu Ser Ser Val Leu Ile Thr Leu Ala Ser Tyr Val Phe Ile Val
                       215
                                           220
Val Thr Ile Ile Lys Met Pro Ser Lys Gly Gly Leu Arg Lys Ala Phe
                    230
                                        235
Ser Thr Cys Thr Ser His Leu Thr Ala Ile Ser Ile Phe His Gly Ile
                                    250
Ile Leu Leu Tyr Cys Val Pro Asn Ser Asn Ser Ser Gln Leu Phe
            260
                               265
Val Lys Val Ala Thr Ala Leu Tyr Thr Ile Met Ile Pro Met Leu Asn
                           280
                                               285
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Thr Val Arg
                       295
Arg Leu Ile Ser Ser Lys Leu His Ser His Leu Thr
```

310

315

```
<211> 319
<212> PRT
<213> Mus musculus
<400> 1786
Met Gln Lys Pro Lys Phe Leu Gln Ile Met Ser Val Glu Asn Ser Thr
                                   10
Val Lys Thr Glu Phe Tyr Leu Leu Gly Phe Ser Asp His Pro Glu Leu
                                25
Gln Ser Leu Leu Phe Ala Val Phe Phe Ser Ile Tyr Ser Ile Thr Leu
                            40
                                                45
Met Gly Asn Ile Gly Met Ile Val Leu Ile Thr Val Ser Pro Asn Leu
                        55
                                            60
His Ile Pro Met Tyr Phe Phe Leu Cys Met Leu Ser Phe Ile Asp Ala
                                        75
                    70
Cys Tyr Ser Ser Val Ile Ala Pro Lys Leu Leu Val Asp Leu Ile Ser
                                    90
Asp Lys Lys Val Ile Ser Tyr Asn Gly Cys Ala Thr Gln Leu Tyr Phe
            100
                                105
                                                    110
Phe Cys Ser Leu Val Asp Thr Glu Ser Phe Leu Leu Ala Ala Met Ala
                            120
Tyr Asp Arg Tyr Ile Ala Ile Cys Asn Pro Leu Leu Tyr Thr Val Ile
                       135
                                            140
Met Ser Lys Arg Val Cys Ile Gln Leu Ala Phe Gly Ala Phe Leu Gly
                   150
                                        155
Gly Thr Met Ser Ser Ile Ile His Thr Thr Asn Thr Phe Gln Leu Ser
                                    170
               165
Phe Cys Ser Lys Val Ile Asn His Phe Phe Cys Asp Val Ser Pro Leu
                                185
Phe Ser Leu Ser Cys Phe Asp Thr Tyr Thr His Asp Ile Ile Leu Val
                            200
        195
                                                205
Val Phe Ala Ser Leu Val Glu Ala Leu Ser Leu Leu Thr Val Leu Leu
                        215
                                            220
Ser Tyr Met Tyr Ile Ile Val Ala Ile Cys Lys Ile Gly Ser Ala Glu
                    230
                                        235
Gly Arg Lys Lys Gly Phe Ser Thr Cys Ala Ser His Leu Ala Val Ile
                245
                                    250
Thr Ile Tyr His Gly Thr Leu Ile Phe Ile Tyr Leu Arg Pro Ser Thr
           260
                                265
Gly His Ser Met Asn Ile Asp Lys Met Thr Ser Val Phe Tyr Thr Leu
                            280
                                                285
Ile Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp
                        295
                                            300
Val Lys Phe Ala Phe Arg Lys Ile Ile Ser Lys Lys Leu Phe Thr
305
                    310
                                        315
<210> 1787
<211> 316
<212> PRT
<213> Mus musculus
```

Met Met Leu Asp Leu Gly Asn Glu Ser Ser Val Thr Met Phe Ile Leu

<210> 1786

<400> 1787

```
10
Ser Gly Phe Ser Glu Tyr Pro His Leu His Ala Pro Leu Phe Leu Leu
                               25
Phe Phe Met Ile Tyr Thr Val Thr Leu Ile Gly Asn Leu Gly Ile Ile
                            40
Val Val Arg Lys Val Asn Pro Lys Leu His Thr Pro Met Tyr Phe Phe
Leu Ser His Leu Ser Phe Leu Asp Ile Cys Tyr Ser Ser Val Phe Thr
                   70
                                        75
Pro Lys Leu Leu Glu Ile Leu Ile Val Glu Asp Arg Thr Ile Ser Phe
               85
                                    90
Lys Gly Cys Met Thr Gln Phe Phe Phe Ile Cys Ala Phe Val Ile Thr
           100
                                105
Glu Met Phe Met Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val
       115
                           120
                                                125
Cys Asn Pro Leu Leu Tyr Thr Val Ser Met Ser Pro Lys Leu Cys Ala
                       135
Phe Leu Val Ala Gly Thr Tyr Met Trp Gly Val Leu Cys Ser Leu Thr
                   150
                                       155
Ile Thr Tyr Ser Leu Leu Gln Leu Ser Tyr Cys Gly Pro Asn Ile Ile
                                    170
Asn His Phe Gly Cys Glu Tyr Ser Ala Ile Leu Ser Leu Ser Cys Ser
           180
                               185
Asp Pro Thr Phe Ser Gln Val Val Cys Leu Thr Ile Ser Ile Phe Asn
                           200
Glu Thr Cys Ser Leu Leu Ile Ile Leu Ala Ser Tyr Val Phe Ile Val
                       215
Val Thr Ile Ile Lys Met Pro Ser Lys Gly Gly Leu Gln Lys Ala Phe
                   230
                                        235
Ser Thr Cys Ser Ser His Leu Thr Ala Ile Ser Ile Phe His Gly Ile
               245
                                    250
Ile Leu Leu Tyr Cys Val Pro Asn Ser Lys Asn Ser Trp Leu Val
                                265
Val Lys Val Ala Thr Val Leu Phe Thr Val Met Ile Pro Met Leu Asn
                            280
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Thr Val Ser
                       295
Arg Leu Met His Leu Lys Leu Gln Ala His Ser Thr
                    310
```

<211> 310

<212> PRT

<213> Mus musculus

<400> 1788

 Met
 Ser
 Val
 Glu
 Asn
 Ser
 Thr
 Val
 Lys
 Thr
 Glu
 Phe
 Tyr
 Leu
 Leu
 Gly
 Leu
 Inchmentation
 Inchmentation

```
Leu Leu Glu Asp Leu Ile Ser Asp Lys Lys Val Ile Ser Tyr Asn Gly
                85
                                    90
Cys Ala Thr Gln Leu Tyr Phe Phe Cys Ser Leu Val Asp Thr Glu Ser
                                105
Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Thr Val Ile Met Ser Lys Arg Val Cys Thr His Leu
                        135
Ala Phe Gly Ala Phe Leu Gly Gly Thr Met Ser Ser Ile Ile His Thr
                   150
                                        155
Thr Asn Thr Phe Gln Leu Ser Phe Cys Ser Lys Val Ile Asn His Phe
                                    170
                165
Phe Cys Asp Ile Ser Pro Leu Phe Ser Leu Ser Cys Thr Asp Thr Tyr
           180
                                185
                                                    190
Thr His Asp Ile Ile Leu Val Val Phe Ala Ser Leu Val Glu Ala Val
       195
                            200
                                                205
Ser Leu Leu Ala Val Leu Leu Ser Tyr Met Tyr Ile Ile Val Ala Ile
                        215
                                            220
Leu Lys Thr Gly Ser Ala Glu Gly Arg Lys Lys Gly Phe Ser Thr Cys
                    230
                                        235
Ala Ser His Leu Thr Val Val Thr Ile Tyr His Gly Thr Leu Ile Phe
                245
                                    250
Ile Tyr Leu Arg Pro Ser Thr Gly His Ser Met Asp Ile Asp Lys Met
           260
                                265
Thr Ser Val Phe Tyr Thr Leu Ile Ile Pro Met Leu Asn Pro Leu Ile
                           280
                                                285
Tyr Ser Leu Arg Asn Lys Asp Val Lys Phe Ala Phe Arg Lys Ile Met
                        295
Ser Lys Lys Ser Phe Ser
305
```

<210> 1789 <211> 316 <212> PRT

<213> Mus musculus

<400> 1789

Met Ile Met Glu Phe Thr Ser Gly Asn Tyr Thr Leu Val Thr Glu Phe 10 Ile Leu Leu Gly Phe Pro Thr Arg Pro Glu Leu Gln Ile Ile Leu Phe 25 Leu Val Phe Leu Thr Leu Tyr Gly Met Ile Leu Ile Gly Asn Ile Gly 40 4.5 Leu Met Leu Leu Ile Arg Thr Asp Pro His Leu Gln Thr Pro Met Tyr 55 60 Phe Phe Leu Ser Asn Leu Ser Phe Val Asp Leu Cys Tyr Ser Ser Val 70 75 Ile Val Pro Asn Met Leu Val Asn Phe Leu Ser Ala Lys Lys Ser Ile Ser Tyr Leu Gly Cys Ala Leu Gln Phe Tyr Phe Phe Cys Thr Phe Ala 100 105 Asp Thr Glu Ser Phe Ile Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val 120 Ala Ile Cys Asn Pro Leu Leu Tyr Thr Val Ala Met Ser Arg Ser Leu 135 140 Cys Ile Trp Leu Ile Val Leu Ser Tyr Val Gly Gly Asn Met Ser Ser

```
145
                  150
                                      155
Leu Val His Thr Ser Phe Ala Phe Ile Leu Lys Tyr Cys Asp Lys Asn
              165
                                  170
Ile Ile Asn His Phe Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Ser
                               185
           180
Cys Thr Asp Thr Ser Ile Asn Glu Trp Leu Leu Ser Thr Tyr Gly Ser
                           200
Ser Val Glu Ile Ile Cys Phe Phe Ile Ile Ile Ser Tyr Phe Phe
                       215
                                          220
Ile Leu Leu Ser Val Leu Lys Ile Arg Ser Thr Ser Gly Arg Lys Lys
                   230
                                       235
Thr Phe Ser Thr Cys Ala Ser His Leu Thr Ser Val Ala Ile Tyr Gln
               245
                               250
Gly Thr Leu Leu Phe Ile Tyr Ser Arg Pro Ser Ser Leu Tyr Ser Pro
           260
                               265
Asn Thr Asp Lys Ile Ile Ser Val Phe Tyr Thr Ile Ile Ile Pro Val
                          280
Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala
                       295
Ala Lys Lys Ala Leu Arg Ser Lys Ile Gln Ser Pro
                   310
```

<211> 313

<212> PRT

<213> Mus musculus

<400> 1790

Met Ser Val Glu Asn Ser Thr Val Lys Thr Glu Phe Tyr Leu Leu Gly 5 10 Phe Ser Asp His Pro Glu Leu Gln Ser Leu Leu Phe Ala Val Phe Phe 25 . Ser Ile Tyr Ser Ile Thr Leu Met Gly Asn Ile Gly Met Ile Val Leu 40 Ile Thr Val Ser Pro Asn Leu His Ile Pro Met Tyr Phe Phe Leu Trp 55 60 Met Leu Ser Phe Ile Asp Ala Cys Ser Ser Ser Val Ile Ala Pro Lys 70 75 Leu Leu Val Asp Leu Ile Ser Asp Lys Lys Val Ile Ser Tyr Asn Gly 85 90 Cys Ala Thr Gln Phe Tyr Phe Cys Cys Ser Leu Val Asp Thr Glu Ser 105 Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys Asn 120 115 125 Pro Leu Leu Tyr Thr Val Ile Met Ser Lys Arg Val Cys Thr Gln Leu 135 Ala Phe Glu Ala Phe Leu Gly Gly Thr Met Ser Ser Ile Ile His Thr 150 155 Thr Asn Thr Phe Gln Leu Ser Phe Cys Ser Lys Glu Ile Asn His Phe 165 170 Phe Cys Asp Met Thr Pro Leu Phe Ser Leu Ser Cys Phe Asp Thr Tyr 180 185 Thr His Asp Ile Ile Leu Val Val Phe Ala Ser Leu Val Glu Ala Val 200 205 Cys Leu Leu Ala Val Leu Leu Ser Tyr Met Tyr Ile Ile Val Ala Ile 215

```
Leu Lys Thr Gly Ser Ala Glu Gly Arg Lys Lys Gly Phe Ser Thr Cys
                   230
                                       235
Ala Ser His Leu Ala Val Ile Thr Ile Tyr His Gly Thr Leu Ile Phe
               245
                                    250
Ile Tyr Leu Arg Pro Ser Thr Gly His Ser Met Asp Ile Asp Lys Met
            260
                                265
                                                    270
Thr Ser Val Phe Tyr Thr Leu Ile Ile Pro Met Leu Asn Pro Leu Ile
                           280
                                                285
Tyr Ser Leu Arg Asn Lys Asp Val Lys Phe Ala Phe Arg Lys Ile Ile
                       295
Ser Lys Lys Leu Phe Phe Leu Val Ile
                    310
```

<210> 1791 <211> 316 <212> PRT <213> Mus musculus

<400> 1791

<pre><400> 1791 Met Val Pro Leu Glu Ile Asn Val Ser Val Glu Ile Asn Phe Val Leu</pre>															
Met 1	Val	Pro	Leu	Glu 5	Ile	Asn	Val	Ser	Val 10	Glu	Ile	Asn	Phe	Val 15	Leu
Leu	Gly	Phe	Thr 20	Asp	Tyr	Pro	Asn	Leu 25	Gln	Ile	Pro	Leu	Phe 30	Leu	Ile
Phe	Leu	Phe 35	Met	Tyr	Ile	Ile	Thr 40	Val	Val	Gly	Asn	Leu 45	Gly	Met	Thr
Val	Leu 50	Ile	Asn	Ile	Asp	His 55	Lys	Phe	His	Thr	Pro 60	Met	Tyr	Phe	Phe
Leu 65	Ser	His	Leu	Ser	Phe 70	Val	Asp	Phe	Cys	Tyr 75	Ser	Thr	Ile	Ile	Thr 80
Pro	Lys	Leu	Leu	Glu 85	Asn	Leu	Val	Leu	Ala 90	Asp	Lys	Thr	Ile	Leu 95	Tyr
		_	100			_		Leu 105		_			110		
		115					120	Ala		_		125			
_	130				_	135		Ala			140	_		-	
145				_	150	_		Trp		155					160
		_		165				Lys	170		_			175	
Asn	His	Phe	Phe 180	Cys	Glu	Tyr	Thr	Ala 185	Leu	Ile	Val	Val	Ser 190	Ser	Ser
_		195					200	Leu		_		205			
Glu	Val 210	Ser	Thr	Leu	Leu	Ile 215	Ile	Leu	Thr	Ser	Tyr 220	Val	Leu	Ile	Phe
Val 225	Thr	Val	Leu	Lys	Ile 230	Lys	Ser	Ala	Ser	Gly 235	Arg	Arg	Lys	Ala	Phe 240
Ser	Thr	Cys	Ala	Ser 245	His	Leu	Thr	Ala	Ile 250	Thr	Ile	Phe	His	Gly 255	Thr
Ile	Leu	Ser	Leu 260	Tyr	Cys	Val	Pro	Asn 265	Ser	Lys	Asn	Ser	Arg 270	Asn	Ala
Val	Lys	Val 275	Ala	Ser	Val	Phe	Tyr 280	Ala	Val	Val	Asn	Pro 285	Leu	Leu	Asn
Pro	Leu	Ile	Tyr	Ser	Leu	Arg	Asn	Lys	Asp	Val	Lys	Glu	Val	Phe	Gln

295 290 Lys Leu Val Ser Thr Ser Leu Lys Phe Gln Leu His 310 <210> 1792 <211> 313 <212> PRT <213> Mus musculus <400> 1792 Met Thr Leu Ser Asp Gly Asn His Ser Gly Ala Val Phe Thr Leu Leu 10 Gly Phe Ser Asp Tyr Pro Glu Leu Thr Ile Pro Leu Phe Leu Ile Phe 20 25 Leu Thr Ile Tyr Ser Ile Thr Val Val Gly Asn Ile Gly Met Ile Val Ile Ile Arg Ile Asn Pro Lys Leu His Ile Pro Met Tyr Phe Phe Leu 55 Ser His Leu Ser Phe Val Asp Phe Cys Tyr Ser Ser Ile Val Ala Pro 75 Lys Met Leu Val Asn Leu Val Thr Met Asn Arg Gly Ile Ser Phe Val 85 90 Gly Cys Leu Val Gln Phe Phe Phe Cys Thr Phe Val Val Thr Glu 105 Ser Phe Leu Leu Gly Val Met Ala Tyr Asp Arg Phe Val Ala Ile Arg 120 Asn Pro Leu Leu Tyr Thr Val Ala Met Ser Gln Arg Leu Cys Ala Met 135 140 Leu Val Leu Gly Ser Tyr Ala Trp Gly Val Val Cys Ser Leu Ile Leu 150 155 Thr Cys Ser Ala Leu Asn Leu Ser Phe Tyr Gly Phe Asn Met Ile Asn 165 170 His Phe Phe Cys Glu Phe Ser Ser Leu Ser Leu Ser Arg Ser Asp 185 190 Thr Ser Val Ser Gln Leu Leu Phe Val Phe Ala Thr Phe Asn Glu 200 205 Ile Ser Thr Leu Leu Ile Ile Leu Leu Ser Tyr Val Leu Ile Val Val 215 Thr Ile Leu Lys Met Lys Ser Ala Ser Gly Arg Arg Lys Ala Phe Ser 230 235 Thr Cys Ala Ser His Leu Thr Ala Ile Thr Ile Phe His Gly Thr Ile 245 250 Leu Phe Leu Tyr Cys Val Pro Asn Ser Lys Asn Ser Arg His Thr Val 265 Lys Val Ala Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro 280 Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Thr Val Lys 295 Ile Ile Gly Thr Lys Val Tyr Ser Ser 310 <210> 1793 <211> 314

<212> PRT

<213> Mus musculus

```
<400> 1793
Met Ile Leu Thr Asp Ile Asn Leu Thr Ser Glu Val Thr Phe Ala Leu
Leu Gly Phe Ser Asp Tyr Pro Glu Leu Gln Val Pro Leu Phe Leu Leu
Phe Leu Ala Ile Tyr Ser Phe Ser Val Val Gly Asn Ile Gly Met Met
Ile Ile Lys Ile Asn Pro Lys Leu His Thr Pro Met Tyr Phe Phe
Leu Ser His Leu Ser Phe Ala Asp Phe Cys Tyr Ser Ser Ile Ile Ala
                    70
                                        75
Pro Lys Met Leu Val Asn Leu Val Val Glu Asp Arg Thr Ile Ser Phe
                                    90
Leu Gly Cys Ile Met Gln Phe Phe Phe Phe Cys Thr Phe Val Val Thr
           100
                                105
Glu Leu Ile Leu Phe Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val
                            120
                                                125
Cys Asn Pro Leu Leu Tyr Thr Val Val Met Ser Gln Arg Leu Cys Ala
                        135
Leu Leu Val Leu Gly Ser Tyr Ala Trp Gly Val Val Cys Ser Leu Thr
                    150
                                        155
Leu Thr Cys Ser Ala Leu Asn Leu Tyr Phe Arg Gly Phe Asn Thr Ile
               165
                                    170
Asn His Phe Phe Cys Glu Leu Ser Ser Leu Ile Ala Leu Ser Cys Ser
                                185
            180
                                                    190
Asp Ser His Leu Thr Gln Leu Leu Phe Ile Val Ala Thr Phe Asn
       195
                            200
Glu Ile Ser Thr Leu Leu Ile Ile Leu Thr Ser Tyr Leu Phe Ile Val
                        215
                                            220
Val Thr Ala Leu Lys Met His Ser Ser Ser Gly His Arg Lys Val Phe
                    230
                                        235
Ser Thr Cys Ala Ser His Met Thr Ala Ile Thr Ile Phe His Gly Thr
                                    250
Ile Leu Phe Leu Tyr Cys Val Pro Asn Ser Lys Asn Ser Arg His Thr
                                265
Val Lys Val Ala Ser Leu Phe Tyr Thr Val Val Ile Pro Met Leu Asn
                            280
                                                285
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Thr Val Ser
                        295
Lys Leu Met Asn Val Arg Lys Phe Ser Gln
                    310
<210> 1794
<211> 311
<212> PRT
```

<213> Mus musculus

<400> 1794

Met Asp Glu Gly Asn Cys Ser Ser Ile Thr Glu Phe Ile Leu Leu Gly 10 Ile Thr Asp Asp Pro Ser Met Lys Val Val Leu Phe Ile Ser Phe Leu 25 Ile Ile Tyr Leu Ile Ile Leu Val Ala Asn Ile Gly Ile Ile Val Leu 40 Ile Arg Ile Asp Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser

```
55
His Leu Ser Phe Ser Asp Leu Cys Tyr Ser Thr Ala Val Gly Pro Lys
                   70
                                       75
Met Leu Val Asp Leu Leu Ala Lys His Lys Ser Leu Ser Phe Leu Gly
               85
                                   90
Cys Ala Leu Gln Phe Phe Thr Cys Val Phe Ile Asp Val Glu Cys
                               105
Val Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Lys Ala Ile Ser Asn
                           120
Pro Leu Met Tyr Val Val Asp Met Ser Ser Arg Phe Cys Tyr Gln Leu
                       135
Leu Ala Gly Val Tyr Val Leu Ala Met Ile Asp Thr Leu Met Gln Thr
                   150
                                       155
Ile Ile Thr Phe Gly Leu Cys Phe Cys Arg Ser Asn Glu Ile Asn His
               165
                                   170
Phe Phe Cys Asp Leu Pro Pro Ile Leu Leu Ser Cys Ser Asp Ile
           180
                               185
Tyr Val Asn Glu Leu Ala Leu Phe Val Phe Ser Gly Phe Val Glu Leu
                           200
Cys Thr Ile Ser Gly Leu Leu Val Ser Tyr Ser Tyr Ile Ile Ala Ser
                       215
Val Leu Lys Ile Ser Ser Asp Glu Gly Arg Phe Lys Ala Phe Ser Thr
                   230
                                       235
Cys Ala Ser His Leu Thr Ala Val Ala Ile Phe Gln Gly Thr Leu Leu
                                   250
Phe Met Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Leu Asp Gln Asp Lys
                               265
           260
Thr Thr Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Tyr Lys Leu
                       295
Arg Asn Lys Arg Ser Phe Lys
```

<211> 326

<212> PRT

<213> Mus musculus

<400> 1795

Met Asn Ser Val Val Ser Ser Asn Arg Ser Gln Val Trp Asn Glu Gly 10 Asn Arg Ser Met Val Ala Ser Phe Ile Leu Leu Ala Phe Ser Glu Phe 20 25 Pro Asn Leu Gln Leu Pro Leu Phe Leu Val Phe Leu Ile Met Tyr Met Val Thr Val Leu Glu Asn Leu Gly Met Ile Phe Ile Ile Arg Met Asn Pro Lys Leu His Thr Pro Met Tyr Phe Phe Leu Ser His Leu Ser Phe 75 Val Asp Phe Cys Tyr Thr Ser Val Ile Ala Pro Lys Leu Leu Asp Leu 85 90 Leu Ile Val Glu Asp Lys Ser Ile Ser Phe Glu Gly Cys Met Ala Gln 105 Tyr Phe Leu Gly Cys Thr Phe Val Ile Ile Glu Met Phe Met Leu Ala 120

```
Val Met Ala Tyr Asp Arg Phe Val Ala Val Cys Asn Pro Leu Leu Tyr
                       135
Thr Val Ala Met Ser His Glu Leu Cys Ser Leu Leu Val Val Ile Thr
                   150
                                       155
Tyr Ile Trp Ala Gly Ile Phe Ser Ser Thr Leu Thr Tyr Ile Leu Leu
               165
                                   170
Gln Leu Ser Tyr Cys Gly Pro Asn Val Ile Asp His Phe Cys Cys Glu
           180
                               185
                                                   190
Tyr Ser Ala Leu Leu Ser Val Ser Cys Ser Asp Thr Ser Phe Ser Gln
                           200
Met Ala Cys Leu Val Ile Ser Met Phe Asn Glu Ala Cys Cys Leu Leu
                       215
                                           220
Ile Ile Ile Thr Ser Tyr Val Phe Ile Val Val Thr Val Ile Lys Ile
                   230
                                       235
Pro Thr Lys Gly Ala Phe Arg Lys Ala Phe Ser Thr Cys Ala Ser His
               245
                                   250
Leu Thr Ala Ile Gly Val Cys His Gly Ile Val Leu Leu Tyr Cys
                .
                               265
Val Leu Lys Ser Lys Ser Ser Leu Phe Leu Val Lys Val Ala Thr Val
                           280
Phe His Ser Met Val Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu
                       295
                                           300
Arg Asn Lys Asp Val Lys Glu Thr Val Arg Lys Leu Ile Tyr Leu Lys
                   310
                                       315
Cys Ile Phe His Ser Ile
               325
```

<210> 1796 <211> 318

<212> PRT

<213> Mus musculus

<400> 1796

Met Gln Phe Ile Lys Gln Arg Arg Met Glu Val Gly Asn Cys Ser Ala 10 Thr Glu Phe Leu Leu Gly Ile Thr Asn Asn Pro Val Ile Lys Val 25 Ile Leu Phe Thr Thr Phe Leu Ile Val Tyr Leu Ile Ile Leu Ile Glu 40 Asn Leu Gly Met Ile Ile Leu Ile Arg Met Asn Ser Gln Leu His Thr 55 Pro Met Tyr Phe Phe Leu Ser His Leu Ser Phe Ser Asp Ile Cys Tyr 70 75 Ser Thr Ala Val Gly Pro Lys Met Leu Val Gly Leu Ile Phe Lys Asn 85 90 Asn Ser Ile Pro Phe Ile Asp Cys Ala Val Gln Phe Phe Ile Phe Cys 100 105 Ile Phe Thr Asp Ala Glu Cys Val Leu Leu Ala Val Met Ala Phe Asp 120 Arg Tyr Lys Ala Ile Ser Asn Pro Leu Met Tyr Ala Val Asp Met Ser 135 140 Arg Val Val Cys Tyr Gln Leu Leu Ala Val Val Tyr Leu Val Gly Met 150 155 Val Asp Ala Leu Thr His Thr Thr Leu Thr Phe His Leu Cys Phe Cys 170 Gln Ser Lys Glu Ile Asn His Phe Phe Cys Asp Val Pro Pro Leu Leu

```
180
                               185
Leu Leu Ser Cys Ser Asp Thr Glu Val Asn Glu Leu Val Ile Phe Thr
                           200
Leu Phe Gly Phe Ile Glu Leu Ser Thr Ile Ser Gly Val Leu Val Ser
                        215
Tyr Cys Tyr Ile Ile Ser Ser Val Leu Lys Ile Arg Ser Ala Glu Gly
                    230
                                        235
Arg Phe Lys Ala Phe Ser Thr Cys Thr Ser His Leu Thr Val Val Ala
               245
                                   250
Ile Phe Gln Gly Thr Met Leu Phe Met Tyr Phe Arg Pro Ser Ser Ala
                               265
Tyr Ser Leu Asp Gln Asp Lys Met Thr Ser Leu Phe Tyr Thr Leu Val
                           280
Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val
                       295
Lys Ala Ser Val Lys Arg Ser Leu Gln Ser Arg Ile Ser Phe
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1797

Met Asp Lys Gly Asn Cys Ser Thr Leu Thr Glu Phe Leu Leu Gly 10 Ile Thr Ser Asn Pro Glu Val Lys Val Phe Leu Phe Thr Met Phe Leu 20 25 Val Val Tyr Leu Thr Asn Leu Leu Thr Asn Leu Gly Met Ile Ile Leu 40 Ile Arg Met Asp Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 His Leu Ser Phe Ser Asp Leu Cys Tyr Ser Thr Ala Val Gly Pro Lys Met Leu Val Asp Leu Leu Ser Lys Asn Thr Ser Ile Pro Phe Leu Gly 85 90 Cys Ala Met Gln Phe Phe Thr Phe Cys Ile Phe Ile Asp Ala Glu Cys 105 Val Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Lys Ala Ile Ser Asn 120 125 Pro Leu Leu Tyr Ala Val Asp Met Ser Arg Lys Val Cys Phe Gln Leu 135 140 Leu Thr Gly Val Tyr Ser Val Ala Leu Ala Asp Ala Leu Ile His Thr 150 155 Thr Leu Thr Phe His Leu Cys Phe Cys Gly Ser Asn Glu Ile Asn His 170 165 Phe Phe Cys Asp Ile Pro Pro Val Leu Val Leu Ser Cys Ser Asp Thr 180 185 Gln Val Asn Val Leu Val Ile Phe Thr Val Phe Gly Phe Ile Glu Leu 200 205 Ser Thr Ile Ser Gly Val Leu Ile Ser Tyr Cys Tyr Ile Ile Ser Ser 215 Val Leu Lys Ile Ser Ser Ala Ala Gly Arg Leu Lys Ala Phe Ser Thr 230 235 Cys Thr Ser His Leu Thr Ala Val Ala Ile Phe Gln Gly Thr Met Leu 245 250

```
Phe Met Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Leu Asp Gln Asp Lys
            260
                                265
Val Thr Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Gln Arg Ile
                        295
Arg Ser Lys Met Cys Leu Lys
<210> 1798
<211> 308
<212> PRT
<213> Mus musculus
<400> 1798
Met Asp Arg Gly Asn Cys Ser Ser Val Asp Glu Phe Ile Phe Leu Gly
                                    10
Ile Thr Asn Asn Pro Val Lys Lys Val Ala Leu Phe Thr Thr Phe Leu
Val Val Tyr Leu Ile Thr Leu Leu Ala Asn Leu Gly Ile Ile Ile Leu
                            40
Ile Arg Met Asn Thr Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                       55
Asn Leu Ser Phe Cys Asp Phe Cys Tyr Ser Thr Ala Ile Gly Pro Lys
                   70
                                        75
Met Leu Val Asp Leu Leu Ala Ala Glu Lys Ser Ile Pro Phe Phe Gly
               85
                                    90
Cys Ala Val Gln Phe Leu Ile Phe Cys Val Phe Ala Asp Ser Glu Cys
           100
                               105
Leu Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Gln Ala Ile Ser Asn
                            120
Pro Leu Leu Tyr Thr Val Asn Met Ser Ser Met Val Cys Phe Met Leu
                        135
                                            140
```

Met Thr Gly Val Tyr Leu Val Ala Thr Thr Asp Gly Leu Ile His Thr 150 155 Ile Leu Ala Phe Arg Leu Cys Phe Cys Gly Ser Asn Glu Ile Asn His 170 Phe Phe Cys Asp Leu Pro Pro Leu Tyr Leu Leu Ser Cys Ser Glu Ile 185 Gln Val Asn Glu Leu Ala Leu Phe Thr Val Phe Gly Phe Ile Glu Leu 200 Ser Thr Ile Ser Gly Val Leu Val Ser Tyr Cys Tyr Ile Ile Leu Ser 215 220 Val Leu Lys Ile Arg Ser Ala Glu Gly Arg Phe Lys Ala Phe Ser Thr 230 235 Cys Thr Ser His Leu Thr Thr Val Ala Ile Phe Gln Gly Thr Met Leu 245 250 Phe Met Tyr Phe Arg Pro Ser Ser Ser Tyr Ser Leu Asp Gln Asp Lys 265 Met Thr Ser Leu Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Gln Arg Leu 290 295 300 Lys Met Lys Met

305

```
<211> 311
<212> PRT
<213> Mus musculus
<400> 1799
Met Asp Lys Glu Asn Cys Ser Ser Leu Pro Glu Leu Leu Leu Glu
                                    10
Ile Thr Asn Asn Pro Asp Met Lys Val Leu Ile Leu Thr Val Phe Leu
                               25
Ala Ile Asn Leu Ile Val Leu Ile Ile Asn Ile Gly Met Ile Ile Phe
                           40
Ile Lys Met Asn Pro Gln Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser
                       55
His Leu Phe Phe Ser Asp Leu Ser Tyr Ser Ser Ala Ile Gly Ser Lys
                   70
                                       7.5
Met Leu Ile Asp Ile Phe Ser Lys Tyr Lys Thr Ile Pro Leu Leu Phe
Val Pro Phe Asp Ser Phe Phe Val Cys Ile Phe Ile Asp Val Glu Cys
           100
                                105
Val Leu Pro Ala Val Met Ala Phe Asp Gln Tyr Lys Ala Ile Ser His
        115
                           120
Pro Val Ile Tyr Ala Ile Asp Met Ser Asn Arg Val Cys Tyr Gln Phe
                       135
                                           140
Leu Ala Gly Val Tyr Leu Val Gly Met Thr Asp Ala Leu Ile His Arg
                   150
                                       155
Thr Leu Thr Phe Cys Leu Cys Phe Cys Glu Ser His Glu Ile Asn His
               165
                                   170
Phe Phe Cys Asp Ile Pro Pro Ile Leu Leu Ser Cys Leu Asn Thr
           180
                               185
Gln Phe Asn Glu Leu Met Ile Phe Thr Ile Phe Gly Phe Ile Gln Leu
                            200
Ser Thr Ile Ser Glu Val Leu Val Ser Tyr Cys Ser Ile Ile Leu Ser
                        215
                                            220
Val Leu Lys Ile His Ser Ala Lys Gly Arg Phe Lys Ala Phe Ser Thr
                    230
                                        235
Cys Thr Leu His Leu Thr Ala Val Ala Ile Phe Gln Gly Thr Leu Leu
                                   250
               245
Phe Thr Tyr Phe Gln Pro Ser Thr Ser Tyr Ser Leu Asp Gln Asp Lys
                               265
Met Thr Ser Leu Phe Tyr Thr Leu Met Ile Pro Met Leu Asn Pro Leu
                           280
                                               285
Ile Tyr Ser Leu Arg Tyr Lys Asp Val Lys Glu Thr Leu Gln Asn Leu
                       295
Glu Asn Lys Arg Trp Cys Lys
305
                    310
<210> 1800
<211> 315
<212> PRT
<213> Mus musculus
<400> 1800
Met Ile Gln Asn Ile Ser Glu Leu Ser Glu Phe Ile Leu Val Gly Leu
                                   10
```

```
Thr Asp Ala Pro Phe Leu Gln Ile Pro Leu Phe Ile Ile Phe Thr Leu
                                2.5
Ile Tyr Leu Thr Thr Leu Phe Gly Asn Leu Gly Met Ile Leu Leu Ile
Leu Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser Asn
Leu Ser Leu Val Asp Cys Val Tyr Ala Ser Ala Val Thr Pro Lys Val
                    70
                                        75
Met Glu Gly Phe Leu Thr Gly Asn Lys Ile Ile Ser Tyr Asn Ala Cys
                                    90
Ala Ala Gln Met Phe Phe Phe Ala Ala Phe Ala Thr Val Glu Ser Phe
           100
                                105
Met Leu Ala Ser Met Ala Tyr Asp Arg His Ala Ala Val Cys Lys Pro
                           120
Leu His Tyr Ser Thr Thr Met Thr Thr Thr Ile Cys Val Leu Leu Leu
                       135
                                           140
Ala Gly Ser Tyr Val Ser Gly Leu Leu Gln Ser Ser Ile His Val Ser
                   150
                                       155
Phe Thr Phe Gln Leu Ser Phe Cys His Ser Asn Val Val Asn His Phe
                                    170
Phe Cys Asp Ile Pro Pro Leu Leu Ala Leu Ser Cys Ser Ser Ile His
            180
                                185
Thr Asn Glu Ile Ile Leu Phe Met Leu Ala Ala Phe Asn Val Ala Phe
                           200
                                                205
Thr Leu Leu Val Ile Leu Ser Ser Tyr Leu Leu Ile Phe Val Ala Ile
                       215
                                            220
Leu Arg Met Arg Ser Ala Glu Ser Arg Lys Lys Ala Ile Ser Thr Cys
                   230
                                        235
Ala Ser His Leu Thr Thr Val Ser Ile Phe Tyr Gly Thr Ile Ile Phe
                                   250
               245
Met Tyr Leu Gln Pro Ser Ser Asn His Ser Met Asp Thr Asp Lys Met
           260
                                265
Ala Ser Val Phe Tyr Thr Met Val Ile Pro Met Leu Asn Pro Leu Val
        275
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Phe Lys Lys Val Ala
                        295
Gly Lys Ala Val Leu Ser Leu Gly Leu Val Asn
                    310
```

```
<210> 1801
```

<400> 1801

 Met
 His
 Asn
 Ile
 Ser
 Glu
 Val
 Thr
 Glu
 Phe
 Ile
 Leu
 Val
 Ile
 Leu
 Thr
 10
 Ile
 Leu
 Val
 Ile
 Il

<211> 313

<212> PRT

<213> Mus musculus

85 Thr Gln Met Phe Phe Leu Ile Gly Phe Ala Ile Ile Glu Gly Phe Leu 105 Leu Ala Ser Met Ala Tyr Asp Arg His Ala Ala Val Cys Lys Pro Leu 120 125 Tyr Tyr Ser Thr Ser Met Thr Thr Ile Cys Thr Leu Leu Ile Val 135 Gly Ser Tyr Ile Ser Gly Leu Leu Gln Ser Ser Ile His Val Ala Phe 150 155 Thr Phe His Leu Ser Phe Cys His Ser Asn Val Val Asn His Phe Phe 165 170 Cys Asp Ile Pro Pro Leu Leu Ala Leu Ser Cys Ser Ser Val Tyr Ile 180 185 Asn Glu Ile Val Leu Phe Ile Leu Ala Ala Leu Asn Ile Ala Leu Thr 195 200 205 Ile Leu Val Ile Val Asn Ser Tyr Val Leu Ile Phe Val Ala Ile Leu 215 Arg Met Arg Ser Thr Asp Gly Gln Lys Lys Ala Ile Ser Thr Cys Ala 230 235 Ser His Leu Thr Thr Val Ser Ile Phe Tyr Gly Thr Ile Ile Phe Met 250 Tyr Leu Gln Pro Ser Ser Thr His Ser Met Asp Thr Asp Lys Val Ala 260 265 Ser Val Phe Tyr Thr Met Ile Ile Pro Met Leu Asn Pro Leu Val Tyr 280 Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Phe Lys Lys Val Thr Arg 295 Lys Val Leu Phe Ser Leu Gly Leu Val

<210> 1802

<211> 315

<212> PRT

<213> Mus musculus

<400> 1802

Met Ala Asp Asn Gly Thr Arg Leu Thr Glu Phe Ile Leu Met Gly Phe 10 Gln Leu Gln Ala Glu Leu Gln Leu Gly Leu Phe Phe Thr Phe Leu Thr 25 Phe Tyr Leu Ile Thr Ile Ala Gly Asn Leu Gly Met Ile Met Leu Ile 4.0 Gln Ser Asp Pro Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser His 55 Leu Ser Phe Leu Asp Ile Cys Tyr Ser Ser Val Ile Val Pro Gln Leu 70 75 Leu Glu Ile Leu Gly Asn Asn Lys Met Val Ile Thr Tyr Glu His Cys 90 Ala Thr Gln Phe Phe Phe Thr Phe Tyr Ala Ser Thr Glu Cys Phe 105 Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asn Pro 120 Leu Leu Tyr Ala Met Ala Met Thr Pro Gln Thr Arg Leu Gly Leu Val 135 140 Ala Ala Ala Tyr Ser Gly Ala Met Val Asn Thr Val Val Arg Thr Gly 150 155

```
Cys Thr Phe Ser Ile Ser Phe Cys Lys Ser Asn Gln Val Asp Phe Leu
                                    170
               165
Phe Cys Asp Leu Pro Pro Leu Met Lys Leu Ala Cys Ser Glu Thr Lys
                               185
Leu Gln Glu Gln Val Ile Phe Leu Phe Ala Phe Leu Val Ile Ile Thr
                            200
Ser Val Ser Val Ile Leu Val Ser Tyr Leu Phe Ile Ile Trp Ala Ile
                       215
                                            220
Leu Lys Ile Arg Thr Ala Gly Ala Lys Ala Lys Thr Phe Ser Thr Cys
                   230
                                        235
Ala Ser His Met Ile Ala Val Ala Leu Phe Phe Gly Thr Ile Ile Phe
               245
                                    250
Met Tyr Leu Lys Gly Asn Met Gly Lys Ser Leu Trp Glu Asp Lys Ile
           260
                               265
Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Met Ile
       275
                           280
                                                285
Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Leu Lys Lys Ala Phe
                       295
Lys Arg Ile Lys Ser Ser Gln Glu Ser Lys Thr
305
                    310
```

<210> 1803 <211> 315

<212> PRT

<213> Mus musculus

<400> 1803

Met Ala Asp Asn Gly Thr Arg Leu Thr Glu Phe Ile Leu Ile Gly Phe 10 Gln Leu Gln Ala Glu Leu Gln Leu Cys Leu Phe Phe Ile Phe Leu Ala 25 Phe Tyr Leu Ile Thr Ile Val Gly Asn Leu Gly Met Ile Met Leu Ile Gln Ser Asp Pro Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser His Leu Ser Phe Leu Asp Val Cys Tyr Ser Ser Val Ile Val Pro Gln Leu 70 75 Leu Glu Thr Leu Gly Ser Asn Lys Met Val Ile Thr Tyr Glu Arg Cys 8.5 90 Ala Thr Gln Phe Phe Phe Thr Leu Tyr Ala Ser Thr Glu Cys Phe 100 105 Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asn Pro 120 115 125 Leu Leu Tyr Ala Met Ala Met Thr Pro Gln Thr Arg Leu Gly Leu Val 135 140 Ala Ala Tyr Ser Gly Ala Met Val Asn Thr Val Val Arg Thr Gly 150 155 Cys Thr Phe Ser Ile Ser Phe Cys Lys Ser Asn Gln Val Asp Phe Phe 170 Phe Cys Asp Leu Pro Pro Leu Leu Lys Leu Ser Cys Ser Glu Thr Lys 180 185 Leu Arg Glu Gln Val Ile Phe Leu Phe Ala Phe Leu Val Ile Thr Thr 200 205 Ser Val Ser Val Ile Leu Val Ser Tyr Leu Phe Ile Ile Trp Ala Ile 215 220 Leu Lys Ile Arg Thr Ala Gly Ala Lys Ala Lys Thr Phe Ser Thr Cys

```
225
                    230
                                       235
Ala Ser His Met Ile Ala Val Ala Leu Phe Phe Gly Thr Leu Ile Phe
               245
                                    250
Met Tyr Leu Lys Gly Asn Met Gly Lys Ser Leu Trp Gln Asp Lys Ile
            260
                                265
Val Ser Val Phe Tyr Thr Val Val Ile Pro Met Leu Asn Pro Met Ile
                            280
Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Leu Lys Lys Ala Phe
                       295
Lys Arg Ile Lys Ala Ser Gln Glu Ser Lys Thr
                    310
<210> 1804
<211> 321
<212> PRT
<213> Mus musculus
<400> 1804
Met Thr Val Lys Asn Ile Thr Thr Met Ser Gly Phe Leu Leu Met Gly
Phe Ser Asp Asn Arg Glu Leu Gln Ile Leu Tyr Ala Leu Leu Phe Leu
                                25
                           40
                        55
                                           60
                    70
                                        75
                85
                                    90
                                105
                            120
                       135
                                            140
```

Leu Thr Tyr Leu Leu Gly Ser Ala Gly Asn Phe Ile Ile Ile Thr Ile Thr Thr Leu Asp Pro Gln Leu Gln Ser Pro Met Tyr Tyr Phe Leu Lys His Leu Ser Ile Leu Asp Leu Ser Ser Leu Ser Val Thr Val Pro Gln Tyr Val Asp Ser Ser Leu Ala Gly Ser Gly Tyr Ile Ser Tyr Gly Gln Cys Met Leu Gln Ile Phe Phe Phe Ala Ala Phe Ala Trp Gly Glu Val Ala Ile Leu Thr Val Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Leu Pro Leu His Tyr Glu Val Ile Met Ser Pro Arg Lys Cys Thr Trp Ala Val Thr Ser Val Trp Leu Ser Ser Val Ile Pro Gly Thr Leu Tyr Ile 150 155 Ala Ser Ile Phe Ser Ile Arg Phe Cys Arg Ala Lys Ile Ile His Gln 170 165 Leu Phe Cys Asp Val Pro Gln Leu Leu Lys Leu Ser Cys Ser Asn Asp 185 His Leu Val Val Ile Gly Met Val Ser Phe Met Thr Ala Val Ala Phe 195 200 205 Ala Cys Phe Val Gly Ile Val Ile Ser Tyr Val His Ile Phe Ser Thr 215 Val Leu Arg Met Pro Ser Ala Glu Ser Arg Ser Lys Val Phe Ser Thr 230 235 Cys Leu Pro His Leu Phe Val Val Ser Leu Phe Leu Ser Thr Gly Ser 245 250 Cys Ala Tyr Leu Asn Thr Ser Ser Asp Ser Pro Thr Ala Leu Glu Phe 265 Leu Phe Ser Ile Phe Tyr Thr Val Leu Pro Pro Thr Leu Asn Pro Val 280 285 Ile Tyr Ser Leu Arg Asn Glu Thr Ile Lys Ser Val Val Arg Lys Leu 290 295

Leu Leu Ser Ser Lys Phe Thr Val Arg Ile Ile Cys Pro Val Ala Thr 305 310 315 320 Asp

<210> 1805 <211> 330 <212> PRT <213> Mus musculus <400> 1805 Met Ile Ser Tyr Ser Phe Phe Gln Glu Met Ser Val Asn Cys Ser Leu 10 Trp Gln Glu Asn Lys Leu Ser Val Lys His Phe Ala Phe Ala Lys Phe 20 25 Ser Glu Val Pro Glu Glu Cys Phe Leu Leu Phe Thr Leu Ile Leu Leu Met Phe Leu Val Ser Leu Thr Gly Asn Ala Leu Ile Thr Leu Ala Ile Cys Thr Ser Pro Ala Leu His Thr Pro Met Tyr Phe Phe Leu Ala Asn 7.0 75 Leu Ser Leu Leu Glu Ile Gly Tyr Thr Cys Ser Val Ile Pro Lys Met 85 90 Leu Lys Asn Leu Val Thr Glu Ala Arg Gly Ile Ser Arg Glu Gly Cys 105 Ala Thr Gln Met Phe Phe Phe Phe Phe Gly Ile Thr Glu Cys Cys 120 125 Leu Leu Ala Ala Met Ala Phe Asp Arg Tyr Met Ala Ile Cys Ser Pro 135 140 Leu His Tyr Ala Thr Arg Met Ser Arg Glu Val Cys Ala His Leu Ala 150 155 Ile Val Ser Trp Gly Met Gly Cys Ile Val Gly Leu Gly Gln Thr Asn 170 165 Phe Ile Phe Ser Leu Asn Phe Cys Gly Pro Cys Glu Ile Asp His Phe 185 Phe Cys Asp Leu Pro Pro Val Leu Ala Leu Ala Cys Gly Asp Thr Ser 195 200 205 Gln Asn Glu Ala Ala Ile Phe Val Thr Val Val Leu Cys Ile Ser Ser 215 220 Pro Phe Leu Leu Ile Ile Tyr Ser Tyr Val Arg Ile Leu Phe Ala Val 230 235 Leu Val Met Pro Ser Pro Glu Gly Arg His Lys Ala Leu Ser Thr Cys 245 250 Ser Ser His Leu Leu Val Val Thr Leu Phe Tyr Gly Ser Ala Ser Ile 260 265 Thr Tyr Leu Arg Pro Lys Ser Ser His Ser Pro Gly Ile Asp Lys Leu 280 285 Leu Ala Leu Phe Tyr Thr Ala Val Thr Ser Met Leu Asn Pro Ile Ile 295 Tyr Ser Leu Arg Asn Lys Glu Val Lys Ala Ala Leu Arg Arg Thr Leu 310 315 Ser Leu Lys Lys Pro Leu Ala Ile Asn Arg

```
<212> PRT
<213> Mus musculus
<400> 1806
Met Ile Asn Ser Ser Val Ser Ser Asp Phe Ile Leu Val Gly Phe Ser
                                   10
Asp Gln Pro Gln Leu Glu Arg Arg Leu Phe Ile Val Val Leu Ile Ser
                               25
Tyr Leu Leu Thr Leu Val Gly Asn Thr Ile Ile Ile Leu Ile Ser Ser
                           40
Ile Asp Ser Lys Leu Lys Thr Pro Met Tyr Phe Phe Leu Thr His Leu
                       55
Ser Phe Val Asp Ile Cys Phe Thr Thr Ser Ile Val Pro Gln Leu Leu
                   70
                                       75
Trp Asn Leu Lys Gly Pro Ala Lys Thr Ile Thr Ala Val Gly Cys Ala
               85
                                   90
Val Gln Leu Tyr Val Ser Leu Thr Leu Gly Ser Thr Glu Cys Ile Leu
                              105
Leu Ala Val Met Ala Phe Asp Arg Tyr Ala Ala Val Cys Lys Pro Leu
                           120
                                               125
His Tyr Val Ala Val Met Asn Pro Gln Leu Cys Arg Ala Leu Ala Gly
                       135
Ile Ser Trp Leu Ser Gly Ile Gly Asn Ala Leu Ile Gln Gly Thr Ile
                  150
                                       155
Thr Leu Trp Leu Pro Arg Cys Gly His Leu Trp Leu His His Phe Phe
                                   170
Cys Glu Val Pro Ser Met Ile Lys Leu Ala Cys Val Asp Ile His Ala
           180
                               185
Asn Glu Val Gln Leu Phe Val Ala Ser Leu Val Leu Leu Leu Pro
       195
                           200
                                               205
Leu Ala Leu Ile Leu Thr Ser Tyr Gly His Ile Ala Lys Ala Val Ile
                       215
                                           220
Arg Ile Lys Ser Ser Gln Ala Trp Arg Arg Ala Leu Gly Thr Cys Gly
                   230
                                       235
Ser His Leu Met Val Val Ser Leu Phe Tyr Gly Ser Ile Thr Ala Ile
               245
                                   250
Tyr Ile Gln Pro Asn Ser Ser Tyr Ala His Thr His Gly Lys Phe Ile
                              ` 265
Ser Leu Phe Tyr Thr Val Met Thr Pro Thr Leu Asn Pro Leu Ile Tyr
                          280
Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Gly Arg Leu Phe Asn
                       295
Arg Ala Ser Gly Val
305
<210> 1807
<211> 321
<212> PRT
<213> Mus musculus
<400> 1807
Met Ser Ile Asn Cys Ser Leu Trp Gln Glu Asn Ser Leu Ser Val Lys
                                  10
Arg Phe Ala Phe Ser Lys Phe Ser Glu Val Pro Gly Glu Cys Phe Leu
                               25
```

<211> 309

```
Leu Phe Thr Leu Ile Leu Leu Met Phe Leu Val Ser Leu Thr Gly Asn
                            40
Glu Leu Ile Ala Ile Ala Ile Cys Thr Ser Pro Ala Leu His Thr Pro
                       55
Met Tyr Phe Phe Leu Ala Asn Leu Ser Leu Leu Glu Ile Gly Tyr Thr
                                        75
Cys Ser Val Ile Pro Lys Met Leu Gln Ser Leu Val Ser Glu Ala Arq
                                    90
Glu Ile Ser Arg Glu Gly Cys Ala Thr Gln Met Phe Phe Thr Phe
            100
                               105
Phe Gly Ile Thr Glu Cys Cys Leu Leu Ala Ala Met Ala Tyr Asp Arg
                           120
Cys Met Ala Ile Cys Ser Pro Leu His Tyr Ala Thr Arg Met Ser His
                       135
Gly Val Cys Ala His Leu Ala Ile Val Ser Trp Gly Met Gly Cys Ile
                   150
                                       155
Val Gly Leu Gly Gln Thr Asn Phe Ile Phe Ser Leu Asn Phe Cys Gly
               165
                                   170
Pro Cys Glu Ile Asp His Phe Phe Cys Asp Leu Pro Pro Val Leu Ala
                                185
Leu Ala Cys Gly Asp Thr Ser Gln Asn Glu Ala Ala Ile Phe Val Ala
                            200
Ala Ile Leu Cys Ile Ser Ser Pro Phe Leu Leu Ile Ile Tyr Ser Tyr
                       215
                                           220
Val Arg Ile Leu Val Ala Val Leu Val Met Pro Ser Pro Glu Gly Arg
                   230
                                       235
His Lys Ala Leu Ser Thr Cys Ser Ser His Leu Leu Val Val Thr Leu
               245
                                    250
Phe Phe Gly Ser Gly Ser Ile Thr Tyr Leu Arg Pro Lys Ser Ser His
           260
                                265
Leu Pro Gly Met Asp Lys Leu Leu Ala Leu Phe Tyr Thr Ala Val Thr
                           280
                                               285
Ser Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys
                       295
Thr Ala Leu Arg Lys Thr Leu Ser Leu Lys Thr Ser Arg Ala Ile Asn
                    310
                                        315
Arq
```

```
<210> 1808
<211> 309
```

<212> PRT

<213> Mus musculus

<400> 1808

 Met
 Arg
 Met
 Asp
 Asn
 Lys
 Ser
 Thr
 Val
 Ser
 Glu
 Phe
 Ile
 Leu
 Leu
 Gly

 Leu
 Pro
 Ile
 Arg
 Pro
 Glu
 Asn
 Gln
 Val
 Ile
 Tyr
 Ser
 Ser
 Leu
 Ile
 Leu
 Leu
 Ile
 Leu
 Leu
 Ile
 Leu
 Ser
 Ser
 Phe
 Phe
 Phe
 Leu
 Leu
 Leu
 Leu
 Ser
 Ser
 Ile
 Ile
 Leu
 Leu
 Leu
 Leu
 Ile
 Ile
 Ile
 Leu
 Leu
 Leu
 Ile
 Ile
 Ile
 Ile
 Leu
 Leu
 Ile
 Ile

85 Cys Val Ser Gln Val Tyr Phe Phe Ile Val Phe Gly Ser Ile Asp Ser 100 105 Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Phe Cys His 120 Pro Leu His Tyr Thr Ile Ile Met Asn Leu Ser Leu Cys Val Leu Leu 135 Val Gly Met Phe Trp Val Leu Ser Ser Ala Asn Ala Leu Val Gln Thr 150 155 Leu Leu Ala Arg Leu Ser His Phe Arg Asn Asn Thr Ile Pro Tyr 165 170 Tyr Phe Cys Asp Leu Ser Thr Leu Leu Lys Leu Ser Ser Asp Thr 180 185 Thr Ile Asn Asp Leu Ile Ile Leu Val Leu Gly Asn Ala Val Ile Thr 195 200 205 Leu Pro Phe Ile Cys Ile Leu Val Ser Tyr Gly Tyr Ile Gly Val Thr 215 220 Ile Leu Lys Thr Pro Ser Ile Lys Gly Ile Arg Lys Ala Leu Ser Thr 230 235 Cys Gly Ser His Leu Cys Val Val Ser Leu Tyr Tyr Gly Ser Ile Ile Gly Leu Tyr Cys Val Pro Ser Ser Asn Asn Thr Ser Glu Lys Asn Ala 265 260 Ile Val Ala Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe 280 Ile Tyr Ser Leu Arg Asn Gln Asp Met Lys Gly Ala Leu Arg Asn Ile 295 Leu Ser Arg Thr Gln 305

<210> 1809

<211> 312

<212> PRT

<213> Mus musculus

<400> 1809

Met Lys Arg Asp Asn Gln Ser Met Val Ser Glu Phe Ile Leu Leu Gly 10 Leu Pro Ile Arg Pro Glu Glu Gln Gly Met Tyr Tyr Ala Leu Phe Leu 25 Thr Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu 40 Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr Val Pro Lys 70 75 Met Leu Arg Asn Met His Ile His Asp Pro Ser Ile Pro Tyr Ala Glu 90 Cys Ile Ala Gln Met Tyr Phe Phe Ile Leu Phe Thr Asp Leu Asp Asn 100 105 Phe Leu Leu Thr Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 Pro Leu His Tyr Thr Thr Ile Met Arg Glu Glu Leu Cys Ile Leu Leu 135 140 Val Ala Ile Ser Trp Ile Leu Ser Cys Val Ser Ala Leu Ser His Thr 150 155

```
Leu Leu Leu Ala Arg Leu Ser Phe Cys Ala Asp Asn Thr Ile Ser His
               165
                                    170
Phe Phe Cys Asp Leu Ala Ala Leu Leu Lys Leu Ser Cys Ser Asp Ile
                               185
Ser Leu Asn Glu Leu Val Ile Phe Thr Val Gly Thr Thr Val Ile Thr
                            200
Leu Pro Leu Ile Cys Ile Leu Ile Ser Tyr Gly His Ile Val Ala Thr
                        215
                                            220
Ile Leu Lys Val Ser Ser Asn Lys Gly Ile Cys Lys Ala Leu Ser Thr
                   230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Tyr Tyr Gly Thr Ile Ile
                                    250
                245
Gly Val Tyr Phe Ile Pro Ser Ser Phe Thr Ser Thr Asp Lys Gly Ile
                                265
Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Phe
                           280
       275
                                               285
Ile Tyr Ser Ile Arg Asn Arg Asp Met Lys Glu Ala Leu Lys Lys Leu
                       295
Phe Asn Arg Ala Ser Ile Ser Thr
305
                    310
```

<211> 313

<212> PRT

<213> Mus musculus

<400> 1810

Met Arg Leu Lys Asn His Ser Ser Val Ser Glu Phe Leu Leu Gly 10 Phe Pro Ile Arg Pro Glu Gln Gly Gly Ile Phe Phe Ser Leu Phe Leu 25 Ala Met Tyr Leu Ile Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Leu Ile Arg Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 His Leu Ala Phe Thr Asp Ile Ser Phe Ser Ser Val Thr Val Pro Lys 70 75 Met Leu Thr Lys Val Gln Asn Gln Pro Ile Pro Ile Thr Tyr Glu Glu 90 Cys Val Ser Gln Thr Tyr Phe Phe Ile Phe Phe Ala Asp Leu Asp Ser 105 100 110 Phe Leu Ile Thr Ser Met Ala Tyr Asp Arg Tyr Met Ala Ile Cys His 120 125 Pro Leu His Tyr Ile Thr Ile Met Ser Gln Ser Arg Cys Ala Met Leu 135 140 Val Ala Val Ser Trp Val Ile Ala Ser Ala Cys Ala Leu Leu His Ser 150 155 Leu Leu Asp Gln Leu Ser Phe Cys Ala Asp His Thr Val Pro His 170 Phe Phe Cys Asp Leu Gly Ala Leu Leu Lys Leu Ser Cys Ser Asp Thr 185 Ser Leu Asn Gln Leu Val Ile Phe Thr Ala Gly Leu Ala Ala Ile Met 200 Leu Pro Phe Leu Cys Ile Leu Ile Ser Tyr Gly Arg Ile Gly Phe Thr 215 220 Ile Leu Gln Val Pro Thr Thr Lys Gly Ile Cys Lys Ala Leu Ser Thr

```
225
                   230
                                      235
Cys Gly Ser His Leu Ser Val Val Ala Leu Tyr Tyr Gly Ser Ile Ile
              245
                                  250
Gly Leu Tyr Phe Leu Pro Pro Ser Asn Ser Lys Ile Asn Asn Asn Ile
                               265
           260
Val Ala Ser Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Lys Lys Leu
           295
Leu Ser Lys Lys Thr Glu Phe Ser Lys
                   310
<210> 1811
```

<211> 310 <212> PRT <213> Mus musculus

<400> 1811

Met Glu Gly Val Asn Gln Thr Arg Phe Val Ser Glu Phe Ile Leu Leu 10 Gly Leu Ser Pro Arg Pro Glu Asp Gln Lys Pro Leu Phe Ile Leu Phe 25 Leu Thr Ile Tyr Leu Val Thr Leu Thr Gly Asn Leu Leu Ile Ile Leu 4.0 Ala Ile Arg Ser Asp Pro His Leu His Thr Pro Met Tyr Phe Phe Leu 55 Ser Phe Leu Ser Leu Thr Asp Ile Cys Phe Thr Thr Thr Ile Val Pro 70 75 Lys Met Leu Val Asn Phe Leu Ser Glu Lys Lys Thr Ile Ser Tyr Ala 85 90 Gly Cys Leu Thr Gln Met Tyr Phe Leu Tyr Ala Leu Gly Asn Ser Asp 105 100 Ser Cys Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Val Ala Ile Cys 120 Asn Pro Phe His Tyr Val Thr Ile Met Asn His His Arg Cys Ala Leu 135 140 Leu Val Thr Phe Ser Cys Ser Phe Pro His Phe His Ser Leu Leu His 150 155 Thr Leu Leu Leu Asn Leu Leu Thr Phe Cys Asp Ser Asn Val Ile His 170 165 His Phe Leu Cys Asp Leu Ser Pro Leu Leu Lys Leu Ser Cys Ser Ser 185 190 Thr Phe Val Asn Glu Ile Val Ile Val Thr Glu Gly Ala Leu Val Leu 200 205 Val Thr Pro Phe Leu Cys Ile Ala Phe Ser Tyr Ile Arg Ile Leu Val 215 Thr Val Leu Lys Ile Pro Ser Ala Ala Gly Lys Arg Lys Ala Phe Ser 230 235 Thr Cys Gly Ser His Phe Thr Val Val Thr Leu Phe Tyr Gly Ser Ile 245 250 Phe Tyr Val Tyr Leu Gln Pro Val Ser Thr Tyr Thr Val Lys Asp His 265 Ile Ala Thr Ile Val Tyr Thr Val Leu Ser Ser Met Leu Asn Pro Phe 280 285 Ile Tyr Ser Leu Arg Asn Lys Asp Leu Lys Gln Gly Leu Arg Lys Leu 295

265 Ile Ala Ser Val Met Tyr Ala Val Val Thr Pro Met Leu Asn Pro Phe 280

Ile Tyr Ser Leu Arg Asn Lys Asp Met Thr Ser Ala Leu Arg Arg Phe 295 .

285

<210> 1813 <211> 308 <212> PRT

305

<213> Mus musculus

260

Leu Asn Lys Ile Leu Leu Gln Pro Pro Gln Ser

310

```
<400> 1813
Met Asp Asn Ser Ser Trp Thr Ser Val Ser His Phe Val Leu Leu Gly
                                    10
Ile Ser Thr Asn Pro Val Glu Gln Ile Pro Leu Phe Leu Leu Phe Leu
                                25
Leu Met Tyr Ile Ile Asn Ile Ser Gly Asn Phe Phe Ile Val Thr Leu
Ile Ile Ser Thr Ser His Leu His Thr Pro Met Tyr Ile Phe Leu Ser
                        55
Asn Leu Ala Leu Ala Asp Ile Cys Phe Thr Ser Thr Thr Val Pro Lys
Met Leu Gln Asn Ile Phe Ser Ser Thr Lys Val Ile Ser Tyr Val Gly
               85
                                   90
Cys Leu Ala Gln Thr Tyr Phe Phe Ile Cys Phe Ala Ala Met Glu Asn
                               105
                                                   110
Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys His
                           120
                                               125
Pro Leu Arg Tyr Ser Ser Ile Leu Thr Gly Met Leu Cys Ala Gln Met
                       135
Val Ala Leu Cys His Val Leu Ser His Leu His Ala Leu Leu His Thr
                    150
                                        155
Phe Leu Met Gly Arg Leu Ile Phe Cys Ala Asp Asn Arg Ile Pro His
               165
                                    170
Phe Phe Cys Asp Leu Tyr Pro Leu Met Lys Ile Ser Cys Ser Ser Thr
                                185
Gln Leu Asn Thr Leu Met Ile His Thr Glu Gly Val Ile Val Ile Asn
                            200
                                                205
Gly Ala Leu Ala Phe Ile Ile Ala Ser Tyr Ala Phe Ile Ile Ser Ala
                       215
Val Leu Arg Ile Pro Ser Ala Asn Gly Lys Trp Arg Ser Phe Ser Thr
                   230
                                       235
Cys Gly Ser His Leu Thr Val Val Ala Ile Phe Tyr Gly Thr Leu Thr
                245
                                   250
Trp Val Tyr Phe Arg Pro Leu Ser Ser Tyr Ser Val Val Lys Gly Arg
                                265
Ile Val Thr Val Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Gly Asp Val Lys Glu Ala Phe Arg Lys Trp
    290
                       295
Val Arg Arg Val
305
<210> 1814
<211> 317
<212> PRT
<213> Mus musculus
<400> 1814
Met Ala Thr Lys Asn Lys Thr Glu Val Thr Glu Phe Val Leu Leu Gly
                                    10
Leu Ser Ser Arg Pro Glu Ile Gln Pro Val Ile Phe Gly Val Val Leu
```

20 25 30

Ile Met Tyr Leu Met Ala Val Leu Gly Asn Thr Leu Leu Ile Leu Val
35 40 45

Ala Cys Ser Asp Pro Arg Leu Gln Thr Pro Met Tyr Phe Leu Leu Ser

```
Gln Leu Ser Leu Ile Asp Ile Ser Leu Thr Thr Ile Thr Ile Pro Gln
                   70
                                       75
Met Leu Val His Thr Leu Ser Val Asn Arg Ser Ile Ser Tyr Asn Arg
                                   90
Cys Met Thr Gln Leu Phe Phe Phe Met Ala Val Gly Ser Met Glu Val
                               105
Tyr Leu Leu Gly Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asp
                           120
Pro Leu Arg Tyr Ser Ala Ile Val Ser Tyr Ser Leu Cys Leu Gln Ile
                       135
Thr Leu Thr Ser Trp Met Val Val Ser Leu Asn Ser Leu Leu Tyr Ser
                   150
                                       155
Val Leu Val Thr Arq Leu Thr Phe Cys Gly Asn Lys Val Thr His Phe
               165
                                   170
Phe Cys Asp Ile Thr Pro Leu Leu Lys Leu Ser Cys Thr Arg Pro Val
           180
                              185
Leu Asn Glu Met Leu Ile Phe Thr Glu Gly Val Ala Val Val Gly Ser
                           200
Pro Phe Phe Ile Trp Gly Ser Tyr Val Arg Ile Gly Ile Ala Met
                       215
                                           220
Ala His Met His Ser Phe Ala Ala Leu Lys Lys Ala Leu Ser Thr Cys
                   230
                                       235
Ser Ser His Ile Leu Val Val Leu Leu Phe Gly Thr Leu Ala Arg
                                  250
               245
Met Tyr Leu Lys Pro Ser Ser Ser Tyr Asp Leu Gly Gln Asp Arg Gln
           260
                               265
Val Ala Ile Phe Tyr Thr Leu Ile Ser Pro Met Leu Asn Pro Leu Ile
                          280
Tyr Ser Leu Arg Asn Gln Asp Val Lys Gly Ala Leu Trp Arg Leu Phe
                       295
Arg Lys Leu His Thr Ser Asp Trp Leu Ser Asp Lys Glu
305 . 310
```

<211> 308

<212> PRT

<213> Mus musculus

<400> 1815

Met Ile Thr Glu Asn Trp Thr Leu Ala Gln Asp Phe Leu Leu Gly 10 Phe Pro Gly Ser Gln Val Leu Gln Phe Ser Leu Phe Leu Phe Phe Leu 25 Val Met Tyr Leu Leu Thr Ile Gly Gly Asn Met Ala Ile Leu Leu Leu 40 4.5 Val Ser Thr Ser His Gln Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser 55 Asn Leu Ser Phe Leu Glu Ile Trp Tyr Thr Thr Ala Ala Val Pro Lys Ala Leu Ala Ile Leu Val Gly Lys Ser Gln Ser Ile Ser Phe Leu Gly 8.5 90 Cys Leu Phe Gln Met Tyr Leu Val Phe Ser Leu Gly Cys Thr Glu Tyr 105 Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Phe 120 Pro Leu His Tyr Gln Thr Ile Met Asn Ser Leu Leu Ser Ala Gln Leu

```
130
                       135
                                           140
Ala Leu Ser Ser Trp Ile Cys Gly Phe Leu Ala Ile Ser Val Pro Ala
                 150
                                       155
Ala Leu Ile Ser Thr Leu Ser Phe Cys Gly Thr His Ala Ile Asn His
                                   170
                165
Phe Phe Cys Asp Ile Ala Pro Trp Ile Ala Leu Ala Cys Thr Ser Thr
                               185
Gln Gly Val Glu Thr Val Ala Phe Val Ile Ala Phe Val Val Ile Leu
                           200
                                               205
Ser Ser Cys Leu Ile Thr Leu Ile Ser Tyr Ala Tyr Ile Ile Arg Thr
                       215
                                           220
Ile Leu Arg Ile Pro Ser Thr Ser Gly Arg Arg Lys Ala Phe Ser Thr
                  230
                                        235
Cys Ser Ser His Leu Thr Val Val Leu Ile Trp Tyr Gly Ser Thr Ile
                                   250
               245
Phe Leu His Val Arg Thr Ser Ile Lys Asp Asp Leu Gln Leu Thr Lys
                               265
Ala Val His Val Leu Asn Thr Val Val Thr Pro Ala Leu Asn Pro Phe
                                                285
                            280
Ile Tyr Thr Leu Arg Asn Lys Glu Val Arg Glu Ile Leu Gly Lys Lys
                       295
Trp Lys Arg Lys
305
```

<210> 1816 <211> 308 <212> PRT

<213> Mus musculus

<400> 1816

Met Met Asn Ser Thr Met Val Thr Glu Phe Leu Leu Glu Val Phe Ala 10 Glu Thr Trp Glu Leu Arg Ile Leu Leu Thr Val Leu Phe Leu Leu Met 25 Tyr Leu Gly Ser Leu Phe Gly Asn Leu Ile Ile Ile Val Thr Thr 40 Val Asp Gln Thr Leu Asn Thr Pro Met Tyr Phe Phe Leu Arg Asn Leu 55 Ser Ile Leu Asp Met Gly Phe Val Ser Val Thr Val Pro Asn Ala Cys 70 75 Ile Asn Ser Leu Thr Asp His Arg Asn Ile Ser Val Ala Gly Cys Ala 90 85 Ala Gln Ile Phe Leu Val Phe Phe Cys Ser Cys Val Glu Ile Gln Phe 105 100 110 Leu Thr Thr Met Ala Gln Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 Met Tyr Pro Val Ile Met Thr His Gln Phe Cys Val Gln Met Thr Leu 130 135 Ala Ser Leu Leu Thr Ser Leu Ile Leu Ala Ser Val His Thr Ser Lys 150 155 Thr Phe Gln Leu Ser Phe Cys His Ser Asn Ile Val Pro Gln Phe Phe 165 170 Cys Asp Ile Pro Ser Leu Leu Arg Leu Ser Cys Ser Asp Thr Phe Asn 185 190 Asn Lys Leu Leu Leu Leu Ser Ala Ile Gly Leu Ser Gly Ser Cys 195 200

Phe Thr Phe Ile Ala Val Ser Tyr Val Arg Ile Leu Ser Thr Val Leu 215 Lys Val Pro Val Lys Gly Glu Arg Gly Lys Ala Phe Ser Thr Cys Val 230 235 Pro His Ile Ile Val Val Ser Val Phe Leu Ser Ser Gly Ala Tyr Val 245 250 Tyr Leu Lys Pro Pro Ala Ile Pro Glu Ile Ile Glu Asp Met Thr Leu 265 260 Ser Val Phe Tyr Thr Ile Val Pro Pro Phe Leu Asn Pro Ile Ile Tyr 280 Ser Leu Arg Asn Lys Gln Ile Lys Glu Ala Val Lys Lys Val Ile Phe 295 Arg Phe Leu Ser 305

<210> 1817 <211> 319 <212> PRT <213> Mus musculus

260

<400> 1817 Met Asp Val Lys Asn Gln Thr Ala Val Thr Glu Phe Ile Phe Leu Gly 10 Phe Pro Gly Ser Ser Leu Gln Leu Pro Leu Phe Met Met Phe Leu 25 Thr Val Tyr Leu Leu Ser Leu Met Gly Asn Thr Leu Ile Ile Phe Leu 40 Ile Leu Val Asp Ser Thr Leu Gln Thr Pro Met Tyr Ile Phe Leu Gly 55 Asn Leu Ser Phe Leu Glu Ile Trp Tyr Thr Thr Ala Thr Val Pro Lys 75 70 Leu Leu Ala Thr Cys Val Thr Lys Val Val Thr Ile Pro Val Ala Gly 90 85 Cys Ile Thr Gln Tyr Tyr Phe Phe Phe Ser Leu Gly Ala Thr Glu Cys 105 Ile Leu Leu Ala Val Met Ala Tyr Asp Arg His Val Ala Val Cys Arg 115 120 125 Pro Leu His Tyr Ser Leu Leu Met Ser Val His Ile Cys Leu Arg Phe 135 140 Ser Ala Ala Ser Trp Val Gly Gly Phe Leu Ala Pro Leu Leu Pro Thr 150 155 Ile Leu Ile Ser Gln Leu Asn Phe Cys Gly Pro Gln Lys Ile Asn His 170 165 Phe Phe Cys Asp Ser Asp Pro Ile Phe Lys Leu Ser Cys Ser Asp Thr 185 Phe Leu Val Glu Ala Leu Gly Tyr Thr Cys Ser Ser Val Val Ile Leu 200 205 Ser Ser Phe Leu Leu Thr Met Ser Ser Tyr Gly Asn Ile Val Val Thr 215 Ile Ile Arg Leu Ser Ser Arg Glu Ala Arg Lys Lys Thr Phe Ser Thr 230 235 Cys Ala Ser His Leu Thr Val Val Thr Ile Tyr Tyr Gly Thr Ile Ile 245 250 Phe Ala Tyr Val Arg Pro Pro Ala Lys Tyr Asn Phe Thr Ile Gly Lys

265 Val Val Ser Val Phe Tyr Cys Val Ile Thr Pro Leu Val Asn Pro Leu

275 280 285 Ile Tyr Thr Leu Arg Asn Lys Asp Val Met Lys Ala Phe Gln Lys Phe 295 300 Leu Ser Gln Lys Lys Phe Leu Met Gly Lys Asn Met His Gly Leu 310 <210> 1818 <211> 309 <212> PRT <213> Mus musculus <400> 1818 Met Met Asn Ser Thr Met Val Thr Glu Phe Leu Leu Glu Val Phe Ala 10 Glu Thr Trp Glu Leu Arg Val Leu Leu Ser Val Leu Phe Leu Leu Val 25 Tyr Leu Gly Ser Leu Phe Gly Asn Leu Thr Ile Ile Ile Val Thr Thr 40 Val Asp Gln Thr Leu Asn Thr Pro Met Tyr Phe Phe Leu Arg Asn Leu Ser Ile Leu Asp Met Cys Tyr Val Ser Ile Thr Val Pro Asn Ala Cys 70 75 Ile Asn Ser Leu Thr Asp His Arg Asn Ile Ser Val Thr Gly Cys Ala 90 Ala Gln Ile Phe Leu Phe Phe Cys Ala Cys Val Glu Val Gln Phe 100 105 Leu Thr Ile Met Ala Gln Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 115 120 125 Leu Tyr Pro Met Ile Met Asn His Gln Phe Cys Val Gln Met Thr Leu 130 135 140 Ala Ser Leu Leu Thr Ser Leu Ile Leu Ser Gly Met Asn Thr Phe Lys 150 155 Thr Phe Gln Leu Ser Phe Cys His Ser Asn Val Val Pro Gln Phe Phe 165 170 Cys Glu Leu Pro Ala Leu Leu Arg Leu Thr Cys Ser Asp Thr Phe Asn 180 185 Asn Lys Ile Ile Leu Leu Thr Ala Ile Gly Leu Ser Gly Thr Cys 200 Phe Thr Phe Ile Ala Ile Ser Tyr Val Arg Ile Leu Ser Thr Val Leu 215 220 Lys Val Pro Val Lys Gly Glu Arg Gly Lys Ala Phe Ser Thr Cys Val 230 235 Pro His Ile Ile Val Ala Tyr Leu Phe Phe Cys Ser Gly Ala Tyr Ala 250 245 Tyr Leu Arg Pro Ser Ala Ile Ser Glu Val Val Glu Asp Met Thr Leu 265 Ser Val Phe Tyr Thr Thr Val Pro Pro Phe Leu Asn Pro Ile Ile Tyr 280

Ser Leu Arg Asn Lys Pro Asn Lys Glu Gly Cys Glu Glu Ser Asn Ile

295

<210> 1819 <211> 313

305

His Ile Phe His Ser

<400> 1819 Met Pro Asn Ile Thr Ala Phe Thr Gly Phe Leu Leu Thr Ala Phe Phe Asp Ser Gln Glu Leu Gln Thr Leu Trp Gly Val Phe Phe Leu Gly Ile 25 Tyr Leu Glu Ala Leu Met Ser Asn Leu Ile Ile Ile Thr Leu Ile Thr 40 Leu Asp Leu Gln Leu Gln Thr Pro Met Tyr Phe Phe Leu Lys Asn Leu 55 Ser Leu Leu Asp Val Phe Phe Val Ser Val Pro Ile Pro Lys Phe Val 70 75 Val Asn Ser Leu Ile His Asn Asn Ser Ile Ser Val Leu Ala Cys Ala 85 90 Phe Gln Val Phe Leu Met Thr Ser Phe Ser Ser Gly Glu Val Phe Val 105 Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Phe Pro Leu 120 Asn Tyr Gly Ala Ile Met Asn Asn His Thr Cys Val Leu Met Met Gly 135 140 Val Ser Trp Ala Thr Gly Met Leu Phe Gly Ala Ile Tyr Thr Ala Gly 150 155 Thr Phe Ser Met Pro Phe Cys Gly Ser Asn Val Ile Pro Gln Phe Phe 170 165 Cys Asp Val Pro Ser Leu Leu Arg Ile Ser Cys Ser Glu Thr Leu Val 185 Ala Ile Tyr Ser Cys Leu Gly Ile Gly Val Cys Leu Gly Met Ser Cys 195 200 205 Phe Ile Cys Val Val Ile Ser Tyr Phe Tyr Ile Phe Ser Thr Val Leu 215 Lys Ile Pro Thr Thr Lys Gly Gln Ser Lys Ala Phe Ala Thr Cys Ile 230 235 Pro His Leu Thr Val Phe Thr Val Phe Leu Val Thr Ala Cys Phe Val 245 250 Tyr Leu Lys Pro Phe Thr Asn Thr Leu Ser Ile Ser Glu Arg Leu Phe 265 260 Ser Val Leu Tyr Thr Val Leu Pro Pro Ala Leu Asn Pro Leu Ile Tyr 280 Ser Leu Arg Asn Thr Asp Val Lys Ser Ala Leu Arg Arg Leu Gln Gln 295 Asn Leu Cys Leu Arg Arg Leu Leu Ile 310

<210> 1820 <211> 319 <212> PRT

<213> Mus musculus

<400> 1820

```
35
                           40
Val Asp Leu Lys Leu Gln Thr Pro Met Tyr Phe Phe Leu Lys Asn Leu
                       55
                                            60
Ser Leu Leu Asp Val Phe Leu Val Ser Val Thr Ile Pro Asn Phe Phe
                   70
                                       75
Val Asn Ser Leu Met His Lys Asn Ser Ile Ser Ile Leu Gly Cys Ala
                                    90
               85
Phe Gln Val Phe Phe Met Ala Leu Leu Gly Ser Gly Glu Val Phe Val
Leu Thr Thr Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Ser Pro Leu
                           120
                                                125
His Tyr Glu Val Ile Met Asn Ser Val Thr Cys Val Val Met Met Ser
                       135
                                            140
Val Ser Trp Gly Thr Gly Leu Phe Phe Gly Val Met Tyr Thr Ala Gly
                   150
                                       155
Thr Phe Ser Met Thr Phe Cys Gly Ser Asn Val Ile Pro Gln Ile Phe
               165
                                   170
Cys Asp Val Pro Ser Leu Leu Arg Ile Ser Cys Ser Gly Ser Leu Met
                               185
Ile Ile Tyr Ile Ser Leu Gly Ile Gly Val Cys Leu Gly Met Ser Cys
                            200
                                                205
Phe Ile Cys Val Gly Ile Ser Tyr Ile Tyr Ile Phe Ser Thr Val Leu
Lys Ile Pro Thr Thr Lys Gly Gln Ser Lys Ala Phe Gly Thr Cys Ile
                230
                                       235
Pro His Leu Thr Val Phe Ser Val Phe Ile Ala Thr Ala Cys Phe Val
                                    250
Tyr Leu Lys Pro Pro Ser Asn Ser Ala Ser Leu Thr Asp Arg Leu Phe
           260
                                265
Ser Val Leu Tyr Thr Val Leu Pro Pro Ala Leu Asn Pro Val Ile Tyr
                           280
Ser Leu Arg Asn Asn Asp Val Asp Ser Ala Leu Lys Arg Leu Leu Gln
                       295
                                           300
Asn Leu Tyr Ser Arg Asp Phe Leu His Val Ile His Gln Asn Val
                   310
                                        315
```

<211> 312

<212> PRT

<213> Mus musculus

100

<400> 1821

 Met
 Arg
 Asn
 Gly
 Thr
 Ala
 Ile
 Thr
 Glu
 Phe
 Ile
 Leu
 Leu
 Gly
 Phe
 Ile
 Leu
 Leu
 Phe
 Ile
 Leu
 Phe
 Leu
 Ile
 Phe
 Leu
 Ile
 Phe
 Leu
 Ile
 Phe
 Leu
 Ile
 Ile
 Phe
 Leu
 Ile
 Phe
 Leu
 Ile
 Ile
 Phe
 Leu
 Ile
 Ile
 Phe
 Leu
 Ile
 Ile
 Phe
 Leu
 Ile
 Ile
 Phe
 Ile
 Phe
 Leu
 Ile
 Ile
 Ile
 Phe
 Ile
 Ile
 Phe
 Ile
 Ile</th

105

```
Leu Gly Ser Met Ser Phe Asp Arg Tyr Leu Ala Ile Cys Lys Pro Leu
                           120
Arg Tyr Pro Thr Ile Met Thr Ser Asn Leu Cys Leu Gln Leu Ala Leu
                      135
                               140
Ser Ser Trp Leu Ala Gly Phe Thr Ile Val Phe Cys Gln Thr Met Leu
                   150
                                      155
Ile Val Gln Leu Pro Phe Cys Gly Asn Asn Val Ile Asn His Phe Tyr
                                   170
Cys Asp Val Gly Pro Ile Leu Lys Ala Ala Cys Ala Asp Thr Ser Ile
                              185
Leu Glu Leu Leu Gly Leu Leu Ala Thr Ile Leu Val Ile Pro Gly Ser
                           200
Leu Leu Phe Thr Ile Ile Ser Tyr Ile Tyr Ile Leu Ser Thr Ile Leu
                       215
                                           220
Arg Ile Pro Ser Ala Thr Gly Arg Gln Lys Ala Phe Ser Thr Cys Ala
                  230
                                      235
Ser His Leu Thr Val Val Ser Leu Leu Tyr Gly Ala Val Leu Phe Met
              245
                                  250
Tyr Leu Arg Pro Thr Ala His Ser Ser Phe Lys Ile Asn Lys Val Val
           260
                               265
                                                   270
Ser Val Leu Asn Thr Ile Leu Thr Pro Leu Leu Asn Pro Phe Ile Tyr
                           280
Thr Ile Arg Asn Lys Glu Val Lys Gly Ala Leu Arg Lys Ala Ile Thr
                       295
                                           300
Cys Ala Asn Arg His His Ala Lys
```

<211> 307

<212> PRT

<213> Mus musculus

<400> 1822

Met Glu Ser Gly Asn Leu Ser Met Ile Ile Glu Phe Ile Leu Thr Gly Phe Pro Thr Lys Pro Glu Leu Gln Leu Pro Leu Phe Leu Phe Leu 20 25 Gly Ile Tyr Leu Val Thr Val Leu Gly Asn Leu Gly Met Ile Ile Leu 40 Ile Val Leu Ser Ser Gly Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 60 Ser Leu Ser Phe Ile Asp Leu Cys His Ser Thr Val Ile Thr Pro Lys 70 75 Met Leu Leu Asn Phe Leu Leu Glu Glu Asn Ile Ile Ser Tyr Pro Glu 85 90 Cys Met Thr Gln Leu Tyr Phe Phe Ser Leu Phe Ala Ile Ala Glu Cys 105 His Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Leu Tyr Lys Val Val Met Ser His His Val Cys Phe Trp Phe 135 140 Thr Val Gly Val Tyr Thr Leu Gly Ile Leu Gly Ser Ser Val His Thr 150 155 Gly Leu Met Leu Lys Leu Phe Phe Cys Lys Thr Asn Lys Ile Asn His 165 170 175 Tyr Phe Cys Asp Leu Phe Pro Leu Leu Glu Leu Ser Cys Ser Ser Ile

			180					185					190		
Tyr	Ile	Asn 195	Glu	Leu	Leu	Val	Leu 200	Phe	Leu	Ser	Ala	Leu 205	Asn	Ile	Leu
Thr	Pro 210	Ala	Leu	Thr	Ile	Leu 215	Met	Ser	Tyr	Ile	Leu 220	Ile	Ile	Val	Ser
Ile 225	Leu	Arg	Ile	Arg	Ser 230	Thr	Glu	Gly	Arg	Ser 235	Lys	Ala	Phe	Ser	Thr 240
Cys	Ser	Ser	His	Ile 245	Ser	Ala	Val	Ala	Leu 250	Phe	Tyr	Gly	Ser	Ala 255	Ala
Phe	Thr	Tyr	Leu 260	Gln	Pro	Ser	Ser	Val 265	Ser	Ser	Met	Asn	Gln 270	Gly	Lys
Val	Ser	Ser 275	Val	Phe	Tyr	Thr	Thr 280	Val	Val	Pro	Met	Leu 285	Asn	Pro	Leu
Ile	Tyr 290	Ser	Leu	Arg	Asn	Lys 295	Asp	Val	Lys	Ser	Ser 300	Ile	Lys	Lys	Ile
Leu 305	Asn	Arg													

<211> 307

<212> PRT

<213> Mus musculus

<400> 1823

Met Gly Thr Gly Asn His Ser Met Val Thr Glu Phe Ile Leu Ala Gly 10 Phe Ser Thr Lys Pro Glu Leu His Leu Pro Leu Phe Leu Phe Leu Gly Ile Tyr Leu Leu Thr Val Leu Gly Asn Leu Gly Met Ile Ile Leu 40 45 Ile Leu Leu Ser Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 Ser Leu Ser Phe Ile Asp Leu Cys His Ser Thr Val Ile Thr Pro Lys 70 75 Met Leu Val Asn Phe Val Thr Glu Lys Asn Ile Ile Ser Tyr Pro Glu Cys Met Thr Gln Leu Tyr Cys Phe Leu Val Phe Ala Ile Ala Glu Cys 100 105 His Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 125 Pro Leu Leu Tyr Asn Val Val Met Ser His His Leu Cys Phe Trp Leu 135 140 Thr Val Gly Val Tyr Ser Leu Gly Ile Val Gly Ser Ser Val His Thr 145 150 155 Gly Phe Met Leu Lys Leu Asn Phe Cys Lys Ile Asn Val Ile Asn His 165 170 Tyr Phe Cys Asp Leu Phe Pro Leu Leu Glu Leu Ser Cys Ser Ser Ile 180 185 Tyr Ile Asn Glu Leu Leu Val Leu Phe Leu Ser Ala Leu Asn Ile Leu 200 Thr Pro Ala Leu Thr Ile Leu Met Ser Tyr Ile Phe Ile Ile Val Ser 215 220 Ile Leu Arg Ile Arg Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr 230 235 Cys Ser Ser His Ile Ser Ala Val Ala Ile Phe Tyr Gly Ser Ala Ala

250

245

Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp Gln Gly Lys 265 Val Ser Ser Val Phe Tyr Thr Thr Val Val Pro Met Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ser Ala Val Lys Lys Ile 290 295 Leu Asn Arg 305 <210> 1824 <211> 314 <212> PRT <213> Mus musculus <400> 1824 Met Phe Gln Gly Asn Leu Ser Gly Val Thr Glu Phe Asn Leu Ala Gly Leu Thr Asp Lys Pro Gly Leu Gln Leu Pro Leu Phe Leu Phe Leu 25 20 Gly Ile Tyr Val Val Thr Val Val Gly Asn Leu Ser Met Ile Thr Leu Ile Leu Phe Ser Ser Gln Leu His Thr Pro Met Tyr Tyr Phe Leu Ser 55 Ser Leu Ser Phe Ile Asp Leu Cys Gln Ser Ile Val Ile Ile Pro Lys 75 Met Leu Val Asn Phe Val Thr Val Gln Asn Ile Ile Ser Tyr Pro Glu 85 90 Cys Met Thr Gln Phe Cys Ile Phe Ala Thr Phe Thr Ile Ala Glu Cys 100 105 His Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys 115 120 125 Pro Leu Leu Tyr Asn Ala Val Met Ser Tyr Gln Val Cys Ser Trp Met 135 Ile Phe Gly Val Tyr Ile Met Ala Phe Val Gly Ala Thr Thr Gln Thr 150 155 Val Phe Met Leu Lys Val His Phe Cys Lys Ala Asn Val Ile Asn His 165 170 Tyr Phe Cys Asp Leu Ser Pro Leu Leu Glu Leu Ser Cys Ser Asp Thr 185 Phe Ile Asn Glu Val Leu Ala Leu Cys Phe Ser Val Phe Asn Ile Phe 200 205 Ile Pro Thr Leu Thr Ile Leu Ser Ser Tyr Ile Phe Ile Ile Ala Ser 220 215 Ile Leu Arg Ile Lys Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr 230 235 Cys Ser Ser His Ile Ser Ala Val Ala Ile Phe Phe Gly Ser Leu Ala

Leu Glu Arg Ile Phe Ser Cys Glu Gln Asn 305

```
<211> 311
<212> PRT
<213> Mus musculus
<400> 1825
Met Leu Lys Gly Asn Leu Ser Glu Val Thr Glu Phe Ile Leu Ala Gly
                                   10
Leu Thr Asn Lys Pro Glu Leu Gln Leu Pro Leu Phe Leu Leu Phe Leu
                               25
Ala Ile Tyr Val Val Thr Val Val Gly Asn Leu Gly Met Ile Ile Leu
                           40
Ile Leu Leu Ser Ser His Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
                       55
Ser Leu Ser Phe Ile Asp Leu Cys Gln Ser Thr Val Ile Ile Pro Lys
                        , 75
                   70
Met Leu Val Asn Phe Val Thr Val Lys Asn Ile Ile Ser Tyr Pro Glu
                                   90
               85
Cys Met Thr Gln Leu Tyr Phe Phe Val Thr Phe Ala Ile Ala Glu Cys
His Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                          120
Pro Leu Leu Tyr Asn Ala Val Met Ser Phe Gln Val Cys Ser Ser Met
                      135
Ile Phe Gly Val Tyr Ser Ile Ala Leu Ile Gly Ala Thr Thr His Thr
                   150
                                       155
Val Cys Met Leu Arg Val Asn Phe Cys Lys Ala Asn Val Ile Asn His
               165
                                  170
Tyr Phe Cys Asp Leu Phe Pro Leu Leu Glu Leu Pro Cys Ser Asp Thr
           180
                               185
Phe Ile Asn Glu Val Val Leu Cys Phe Ser Val Phe Asn Ile Phe
                           200
Ile Pro Thr Leu Thr Ile Leu Thr Ser Tyr Ile Phe Ile Ile Ala Ser
                       215
Ile Leu Arg Ile Lys Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr
                                       235
                   230
Cys Ser Ser His Ile Ser Ala Val Ala Ile Phe Phe Gly Ser Leu Ala
               245
                                  250
Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp Gln Gly Lys
           260
                               265
Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu
                          280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Asn Lys Phe
                       295
Phe Glu Arg Lys Phe Phe Leu
<210> 1826
<211> 314
<212> PRT
<213> Mus musculus
<400> 1826
Met Phe Gln Gly Asn Leu Ser Gly Val Thr Glu Phe Asn Leu Ala Gly
```

```
Leu Thr Asp Lys Pro Gly Leu Gln Val Pro Leu Phe Leu Phe Leu
                                25
Gly Ile Tyr Val Val Thr Val Val Gly Asn Leu Ser Met Ile Thr Leu
                           40
Ile Leu Phe Ser Ser Gln Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
                        55
Ser Leu Ser Phe Ile Asp Leu Cys Gln Ser Asn Val Ile Ile Pro Lys
Met Leu Val Asn Phe Leu Ala Val Lys Asn Ile Ile Ser Tyr Pro Glu
                8.5
                                    90
Cys Leu Thr Gln Leu Cys Phe Phe Ala Thr Phe Gly Ile Ala Glu Cys
                               105
Gln Met Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys
                           120
Pro Leu Leu Tyr Asn Ala Val Met Ser Phe Gln Val Cys Ser Trp Met
                       135
                                           140
Ile Phe Gly Val Phe Ser Met Ala Leu Ile Gly Ala Thr Thr Gln Thr
                   150
                                       155
Val Cys Met Leu Arg Val Asp Phe Cys Asn Ala Asn Val Ile Asn His
                165
                                    170
Tyr Phe Cys Asp Leu Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr
            180
                                185
Phe Ile Asn Glu Val Leu Ala Leu Cys Phe Ser Val Phe Asn Ile Phe
        195
                            200
                                                205
Ile Pro Thr Leu Thr Ile Leu Ser Ser Tyr Ile Phe Ile Ile Ala Ser
                       215
                                            220
Ile Leu Gln Ile Lys Ser Thr Glu Gly Arg Ser Lys Ala Phe Ser Thr
                   230
                                        235
Cys Ser Ser His Ile Ser Ala Val Ala Ile Phe Phe Gly Ser Leu Ala
               245
                                    250
Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp Gln Gly Lys
           260
                               265
Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Asn Lys Phe
    290
                       295
Leu Glu Arg Ile Phe Ser Cys Lys Gln Asn
                    310
```

```
<210> 1827
<211> 312
```

<212> PRT

<213> Mus musculus

<400> 1827

 Met Ala Tyr Ser Asn Gln Ser Arg Val Thr Glu Phe Ile Ile Ala Gly 1
 5
 10
 15
 15

 Leu Thr Asn Lys Pro Glu Leu Gln Leu Pro Leu Pro Leu Phe Leu 20
 25
 30
 30
 61
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16
 16

```
85
                                    90
Cys Met Thr Gln Leu Tyr Phe Phe Ile Ala Phe Val Ile Ser Glu Cys
           100
                                105
His Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                           120
Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Val Cys Ser Trp Met
                        135
Val Gly Gly Val Tyr Gly Met Gly Phe Ile Gly Ala Ala Ile His Thr
                    150
                                        155
Phe Cys Met Leu Arg Val Val Phe Cys Lys Asp Asn Ile Ile Asn His
               165
                                   170
Tyr Phe Cys Asp Leu Phe Pro Leu Met Glu Leu Ala Cys Ser Ser Thr
                                185
           180
Tyr Val Asn Glu Val Val Leu Leu Ser Leu Ser Ala Phe Asn Ile Phe
                           200
Ile Pro Thr Leu Thr Ile Leu Gly Ser Tyr Ile Phe Ile Ile Ile Ser
                       215
                                            220
Ile Leu Arg Ile Lys Ser Thr Glu Gly Arg Phe Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Phe Ser Ala Val Ser Val Phe Phe Gly Ser Leu Ala
                245
                                    250
Phe Met Tyr Leu Gln Pro Phe Ser Val Ser Ser Lys Asp Lys Gly Lys
            260
                                265
Val Ser Ser Val Phe Tyr Thr Thr Ile Val Pro Met Leu Asn Pro Met
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Arg Asp Val Lys Leu Ala Leu Asn Lys Leu
                       295
Phe Gln Lys Lys Phe His Val
305
                    310
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1828

Met Asn Pro Ala Asn His Ser Gln Val Ala Thr Phe Phe Leu Leu Gly 10 Leu Ser Gln Val Trp Glu Leu Arg Phe Leu Phe Phe Thr Val Phe Ser 25 Ala Val Tyr Leu Leu Thr Val Thr Gly Asn Leu Leu Ile Val Ala Ile 40 Val Thr Ser Asp Pro Arg Leu His Thr Thr Met Tyr Phe Leu Leu Gly 55 Asn Leu Ser Phe Leu Asp Phe Cys Tyr Ser Ser Ile Thr Ala Pro Arg 70 75 Met Leu Val Asp Leu Leu Ser His Ser Pro Thr Ile Ser Phe Gly Ala 85 90 Cys Leu Thr Gln Leu Phe Phe Phe His Phe Ile Gly Gly Ile Lys Ile 105 Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Ile Ala Ile Ser Gln 120 125 Pro Leu Arg Tyr Thr Leu Ile Met Asn Gln Thr Val Cys Gly Ile Phe 135 140 Met Ala Ala Ser Trp Val Gly Gly Phe Ile His Ser Ile Val Gln Val 150 155

```
Gly Leu Thr Ile His Leu Pro Phe Cys Gly Pro Asp Lys Leu Asp Asn
                                   170
               165
Phe Tyr Cys Asp Val Pro Gln Leu Ile Lys Leu Ala Cys Thr Asp Thr
                              185
Phe Val Leu Glu Leu Met Val Ser Asn Asn Gly Leu Val Thr Leu
                                               205
                           200
Met Cys Phe Leu Val Leu Leu Gly Ser Tyr Thr Ala Leu Leu Val Met
                       215
Leu Arg Ser His Ser Lys Glu Gly Arg Ser Lys Ala Leu Ser Thr Cys
                   230
                                   235
Ala Ser His Ile Thr Val Val Thr Ile Ile Phe Val Pro Cys Ile Tyr
               245
                                   250
Ile Tyr Ala Arg Pro Phe Arg Thr Phe Pro Met Asp Lys Ala Val Ser
           260
                               265
Val Leu Tyr Thr Met Val Thr Pro Met Leu Asn Pro Ala Ile Tyr Thr
       275
                           280
                                              285
Leu Arg Asn Lys Glu Val Ile Val Ala Met Lys Lys Leu Trp Arg Arg
                       295
Lys Lys Asp Phe Leu Gly Ser Ser Asp His
                   310
```

<210> 1829 <211> 312

<212> PRT

<213> Mus musculus

<400> 1829

Met Gly Asn Tyr Ser Ala Val Thr Glu Phe Phe Leu Val Gly Leu Ser 1.0 Gln Tyr Pro Glu Leu Gln Leu Phe Leu Phe Val Leu Cys Leu Ile Met 25 Tyr Leu Ile Ile Leu Leu Gly Asn Ser Leu Leu Ile Ile Ser Ile Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Gly Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Ser Ser Ser Ile Pro Gln Met Leu 70 75 Ile Met Phe Met Ser Ala Arg Lys Ser Ile Ser Phe Leu Gly Cys Ala 90 Leu Gln Met Val Ile Ser Leu Gly Leu Gly Ser Thr Glu Cys Val Leu 100 105 Leu Ala Val Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Asn Pro Leu 115 120 125 Arg Tyr Pro Ile Ile Met Asn Lys Val Leu Tyr Val His Met Ala Val 135 140 Trp Ser Trp Val Ile Gly Cys Leu Asn Ser Leu Val Gln Thr Val Leu 155 150 Thr Met Val Leu Pro Phe Cys Gly Asn Asn Val Ile Asp His Leu Thr 170 Cys Glu Ile Leu Ala Leu Leu Lys Leu Val Cys Ser Asp Ile Thr Met 185 Asn Val Leu Ile Met Thr Val Ala Ser Ile Val Leu Leu Met Ile Pro 200 Leu Met Leu Ile Phe Val Ser Tyr Ile Phe Ile Leu Ser Ser Ile Leu 215 Arg Ile Asn Ser Ala Glu Gly Arg Lys Lys Ala Phe Ser Thr Cys Ser

```
225
                   230
                                       235
Ala His Leu Thr Val Val Ile Leu Phe Tyr Gly Ser Ala Leu Phe Met
               245
                                   250
Tyr Met Lys Pro Lys Ser Lys Tyr Thr Lys Ala Ser Asp Glu Ile Ile
                                265
Gly Leu Ser Tyr Gly Val Val Thr Pro Met Leu Asn Pro Ile Ile Tyr
                            280
Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Val Lys Lys Ile Leu Ser
                       295
                                           300
Lys Arg Leu Tyr Leu Arg Lys Ile
                    310
<210> 1830
<211> 313
<212> PRT
<213> Mus musculus
<400> 1830
Met Glu Pro Gln Asn His Thr Ser Ala Ser Glu Phe Ile Leu Leu Gly
Leu Ser Glu Lys Pro Asp His Asp Pro Val Leu Phe Ser Leu Phe Leu
                                25
Cys Met Tyr Met Ile Thr Val Val Gly Asn Leu Leu Ile Ile Leu Ala
                           40
Ile Ser Phe Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ala
                        55
                                            60
Asn Leu Ser Leu Val Asp Phe Cys Leu Ala Thr Asn Thr Val Pro Lys
                    70
                                        75
Met Leu Val Asn Ile Gln Thr Arg Asn Lys Ser Ile Ser Tyr Pro Cys
                85
                                    90
Cys Leu Thr Gln Met Tyr Phe Phe His Phe Phe Gly Ile Met Asp Ser
           100
                                105
Val Leu Ile Ala Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys His
                           120
Pro Leu His Tyr Ser Thr Ile Met Ser Pro Arg Leu Cys Gly Leu Leu
                        135
    130
                                            140
Val Gly Val Pro Trp Val Tyr Ser Cys Phe Ile Ser Leu Thr His Ile
                   150
                                       155
Leu Leu Met Ala Arg Leu Val Phe Cys Gly Lys Asn Glu Leu Pro His
                                   170
               165
Tyr Phe Cys Asp Leu Thr Pro Leu Leu Arg Leu Ser Cys Thr Asp Thr
                               185
Thr Val Asn Lys Ile Phe Val Leu Ile Val Ala Gly Met Val Ile Ala
                           200
                                                205
Thr Pro Phe Val Cys Ile Leu Ala Ser Tyr Ala Arg Ile Ile Val Ala
                        215
Ile Met Lys Val Pro Ser Ala Gly Gly Arg Lys Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Leu Ser Val Val Ala Leu Phe Tyr Gly Thr Thr Ile
                                    250
                245
Gly Val Tyr Leu Cys Pro Ser Ser Val Arg Thr Ala Val Lys Glu Lys
                               265
Ala Ser Ala Val Met Tyr Thr Ala Val Thr Pro Met Leu Asn Pro Phe
                           280
                                                285
```

Ile Tyr Ser Leu Arg Asn Arg Asp Leu Lys Gly Ala Leu Lys Lys Ile

295

290

Met Glu Ser Lys Asn Gln Thr Asp Val Ser Glu Phe Phe Leu Met Gly Ile Thr Asp Asp Ile Ala Leu Lys Pro Leu Ile Phe Ser Met Phe Thr Ser Met Tyr Leu Ile Thr Ile Leu Gly Asn Leu Leu Ile Ile Leu Thr Val Cys Ser Asp Ser His Leu Gln Thr Pro Met Tyr Ile Phe Leu Ser 60 Asn Leu Ser Phe Asn Asp Ile Cys Leu Ser Thr Thr Ile Ile Pro Lys Thr Leu Val Asn Ile His Ala Gln Asp Gln Ser Ile Thr Tyr Thr Ser Cys Leu Thr Gln Ile Cys Phe Thr Leu Leu Phe Cys Ser Phe Glu Ser Cys Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 125 Pro Leu Asn Tyr Thr Thr Ile Met Asn Pro Gln Thr Cys Gly Leu Leu 135 Ile Leu Leu Ser Leu Ile Ile Ser Leu Val Asn Ser Gly Leu Leu Gly 150 155 Leu Met Val Leu Arg Leu Ser Phe Cys Thr Asn Leu Glu Ile Pro Leu 165 170 Phe Phe Cys Glu Leu Ala Gln Val Ile Lys Leu Ala Cys Ser Asp Thr 180 185 Leu Val Asn Tyr Ile Leu Ile Tyr Leu Ala Thr Ile Ile Leu Asn Gly 200 Ile Pro Ile Ser Gly Ile Ile Phe Ser Tyr Thr Gln Ile Ala Ser Ser 215 220 Val Leu Arg Met Ser Ser Val Lys Gly Lys Tyr Lys Ala Ile Ser Thr 230 235 Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ala Leu 245 250 Gly Val Tyr Ile Ser Ser Ser Phe Thr Thr Ser Val Thr Asn Thr Ala 260 265 Phe Ala Tyr Val Met Cys Thr Leu Val Pro Gln Met Leu Asn Pro Phe 275 280 Ile Tyr Ser Leu Arg Asn Arg Asp Met Glu Val Ala Leu Arg Lys His 295 Ile Asn Arg Ala Met Cys Leu Leu 305 310

<210> 1832

<211> 314

<212> PRT

<213> Mus musculus

```
<400> 1832
Met Gly Arg Glu Asn Gln Ser Phe Val Asp Glu Phe Val Leu Leu Gly
                                    10
Leu Ser Gln Asp Ala Gln Thr Gln Ile Leu Leu Phe Val Leu Phe Phe
Ile Val Tyr Ile Leu Thr Val Leu Gly Asn Leu Leu Ile Ile Val Leu
Ile Leu Met Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Arg
                        55
Asn Leu Ser Phe Ala Asp Leu Cys Phe Ser Asn Ser Ile Val Pro Gln
                                        75
Val Leu Ser His Phe Leu Val Lys Arg Lys Thr Ile Ser Phe Trp Gly
               85
                                    90
Cys Val Thr Gln Val Ile Val Ser Leu Gln Ile Gly Cys Thr Glu Cys
           100
                                105
Ala Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Val Cys Lys
                            120
Pro Leu His Tyr Ser Thr Ile Met Thr Gln Gln Leu Cys Leu Gln Leu
                        135
Ala Leu Gly Ser Trp Ala Ser Gly Leu Leu Val Cys Leu Val Asp Ile
                    150
                                        155
Ala Val Ala Phe His Leu Pro Tyr Arg Gly Gln Asn Ile Val Ser His
                165
                                    170
Tyr Phe Cys Glu Leu Pro Ala Leu Leu Lys Val Ala Ser Ala Asp Thr
                                185
Tyr Ser Thr Glu Met Ala Ile Phe Ala Met Gly Val Val Ile Leu Leu
                            200
                                                205
Ala Pro Val Ser Leu Ile Leu Ile Ser Tyr Trp Asn Ile Ile Ser Thr
                        215
                                            220
Val Ile Gln Met Gln Ser Gly Glu Gly Arg Leu Lys Val Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ile Val Val Leu Phe Tyr Gly Ser Ala Ile
                245
                                    250
Phe Asn Tyr Met Gln Pro Asn Thr Lys Thr Arg Lys Lys Gln Asp Lys
                                265
Ile Met Ser Val Phe Tyr Thr Val Val Thr Pro Met Leu Asn Pro Ile
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Ser Ala Phe Arg Lys Leu
                       295
Ala Ala Arg Val Val Phe Phe Arg Lys Gln
                    310
<210> 1833
<211> 321
<212> PRT
<213> Mus musculus
```

```
Pro Met Tyr Phe Phe Leu Arg Asn Leu Ser Phe Leu Glu Ile Gly Phe
                   70
                                       75
Asn Leu Val Ile Val Pro Lys Met Leu Ser Thr Leu Ile Leu Gln Asp
               85
Lys Thr Ile Ser Phe Leu Gly Cys Ala Thr Gln Met Tyr Phe Phe
                               105
Phe Phe Gly Ala Ala Glu Cys Cys Leu Leu Ala Thr Met Ala Tyr Asp
                           120
Arg Tyr Met Ala Ile Cys Asp Pro Leu His Tyr Pro Ile Ile Met Ser
                       135
Arg Arg Ser Cys Ala Gln Leu Ala Ala Ser Trp Phe Ser Gly Phe
                   150
                                       155
Pro Val Ala Thr Val Gln Thr Trp Ile Phe Ser Phe Pro Phe Cys
               165
                                   170
Gly Pro Asn Met Val Asn His Phe Phe Cys Asp Ser Pro Pro Val Ile
           180
                               185
Ala Leu Val Cys Ala Asp Thr Ser Leu Phe Glu Leu Glu Ala Leu Thr
                                               205
                            200
Ala Thr Val Leu Phe Ile Leu Phe Pro Phe Leu Leu Ile Leu Gly Ser
                        215
Tyr Val Arg Ile Leu Ser Thr Ile Phe Arg Met Pro Ser Ala Glu Gly
                   230
                                       235
Lys Arg Lys Ala Phe Ser Thr Cys Ser Ser His Leu Leu Val Val Ser
                                   250
Leu Phe Tyr Ser Thr Ala Ile Leu Thr Tyr Phe Arg Pro Arg Ser Asn
                               265
           260
                                                  270
Thr Ser Pro Glu Asn Lys Lys Met Leu Ser Leu Ser Tyr Thr Val Ile
                           280
Thr Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Asn Glu Val
                       295
                                          300
Lys Ala Ala Leu Arg Arg Ile Ile His Arg Thr Leu Gly Pro Gln Lys
305
Leu
```

```
<210> 1834
```

<400> 1834

Met Glu Leu Trp Asn Ser Thr Val Gly Ser Gly Phe Ile Leu Val Gly 1.0 Ile Leu Asp Gly Ser Gly Ser Pro Glu Leu Leu Cys Ala Ala Ile Thr 25 Ala Leu Tyr Phe Leu Ala Leu Thr Ser Asn Gly Leu Leu Leu Val 40 Ile Thr Met Asp Ala Arq Leu His Val Pro Met Tyr Leu Leu Gly Gln Leu Ser Leu Met Asp Leu Leu Leu Thr Ser Val Ile Thr Pro Lys 70 75 Ala Val Val Asp Phe Leu Leu Lys Asp Asn Thr Ile Ser Phe Gly Gly 85 90 Cys Ala Leu Gln Met Phe Leu Glu Leu Ala Leu Gly Ser Ala Glu Asp 105 Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Gln

<211> 311

<212> PRT

<213> Mus musculus

```
120
      115
Pro Leu Asn Tyr Thr Ile Leu Met Ser His Lys Val Cys Trp Leu Met
                                 140
                     135
Ile Ala Thr Ser Trp Ile Leu Ala Ser Leu Ser Ala Leu Gly Tyr Ser
                 150
                       155
Ile Tyr Thr Met Gln Tyr Ser Phe Cys Lys Asn Arg Gln Ile Asn His
               165
                                  170
Leu Phe Cys Glu Ile Pro Pro Leu Leu Lys Leu Ala Cys Ala Asp Thr
                              185
Ser Thr Tyr Glu Leu Met Val Tyr Leu Met Gly Val Ile Val Leu Ile
                         200
                                             205
Leu Pro Leu Thr Ala Ile Leu Ala Ser Tyr Ser Leu Ile Leu Phe Thr
                      215
                                         220
Val Leu Asn Met Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Ile
       230
                                      235
Cys Ser Ser His Leu Thr Val Val Gly Met Trp Tyr Gly Gly Ala Ser
              245
                                250
Phe Met Tyr Val Leu Pro Ser Pro Phe His Ser Pro Lys Gln Asp Asn
                             265
Ile Ser Ser Val Phe Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu
                          280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Leu Lys Arg Val
                      295
Leu Gly Lys Arg Leu Ser Ala
```

<210> 1835 . <211> 310

<212> PRT <213> Mus musculus

<400> 1835

Met Gly Lys Leu Asn His Thr Tyr Leu Thr Glu Phe Ile Leu Leu Gly 10 Leu Ser Ser Asp His Gln Thr Gln Ile Leu Leu Phe Val Val Phe Leu Ile Ile Tyr Leu Ile Thr Val Phe Gly Asn Leu Leu Ile Ile Leu Leu 40 Ile His Val Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Lys 55 60 Ile Leu Ser Phe Asn Asp Leu Cys Phe Ser Thr Thr Ile Val Pro Lys 7.0 75 Met Leu Val His Phe Leu Gly Val Arg Lys Thr Ile Ser Phe Ala Gly 90 8.5 Cys Ser Val Gln Met Phe Ser Phe Leu Ile Met Gly Cys Thr Glu Ser 100 105 Ser Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Ile Ala Val Cys Lys 120 Pro Leu His Tyr Ser Thr Ile Met Thr His Lys Val Cys Val Leu Leu 135 Val Val Gly Ser Trp Thr Ser Gly Ile Phe Val Ser Val Val Asp Thr 150 155 Ser Phe Thr Leu Cys Leu Thr Tyr Arg Gly Pro Asn Ile Ile Asn His 165 170 Tyr Phe Cys Glu Pro Pro Ala Leu Leu Lys Leu Ala Ser Glu Glu Thr 180 185

```
Tyr Thr Ala Glu Met Val Ile Phe Ala Met Gly Ile Ile Ile Leu Leu
                           200
Gly Pro Val Ser Leu Ile Leu Phe Ser Tyr Trp Asn Ile Ile Ser Thr
                      215
Val Val Gln Ile Gln Ser Gly Glu Gly Arg Leu Lys Val Phe Ser Thr
                   230
                                       235
Cys Ser Ser His Phe Ile Val Val Ile Phe Phe Tyr Gly Ser Thr Ile
               245
                                    250
Phe Thr Tyr Met Gln Pro Asn Ser Lys Lys Met Asn Glu Lys Asp Lys
           260
                               265
Val Ile Ser Val Phe Tyr Ser Ile Val Thr Ser Met Met Asn Pro Phe
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Lys Lys Val
                   295
Leu Lys Arg Glu Ile Arg
```

<210> 1836 <211> 316 <212> PRT

<213> Mus musculus

<400> 1836

Met Glu Leu Trp Asn Ser Thr Leu Gly Ser Gly Phe Ile Leu Val Gly Ile Leu Asp Asp Ser Gly Ser Pro Glu Ile Leu Cys Ala Thr Phe Thr 25 Ala Leu Tyr Met Leu Ala Met Ile Ser Asn Gly Ile Leu Leu Leu Val 40 Ile Thr Met Asp Ala Arg Leu His Val Pro Met Tyr Leu Leu Trp 5.5 60 Gln Leu Ser Leu Met Asp Leu Leu Thr Ser Val Ile Thr Pro Lys 70 75 Ala Val Ile Asp Phe Leu Leu Lys Asp Asn Thr Ile Ser Phe Gly Gly 85 90 Cys Ala Leu Gln Met Phe Leu Glu Leu Thr Leu Gly Gly Ala Glu Asp 105 Leu Leu Leu Ala Phe Met Ala Tyr Gly Arg Tyr Val Ala Ile Cys His 120 Pro Leu Asn Tyr Met Thr Phe Met Lys Pro Arg Ile Cys Trp Leu Gly 135 140 Val Phe Ile Ser Trp Thr Leu Ala Ser Leu Ser Ala Val Gly Tyr Thr 150 155 Ile Tyr Thr Met Gln Tyr Pro Phe Cys Lys Ser Arg Lys Ile Arg His 165 170 Leu Phe Cys Glu Ile Pro Pro Leu Leu Lys Leu Ala Cys Ala Asp Thr 185 Ser Lys Tyr Glu Leu Met Val Tyr Val Met Gly Val Ile Phe Leu Leu 200 205 Leu Pro Leu Ala Ala Ile Leu Ser Ser Tyr Thr Leu Ile Leu Leu Thr 215 220 Val Leu His Met Pro Ser His Glu Gly Arg Lys Lys Ala Leu Val Thr 230 235 Cys Ser Ser His Leu Thr Val Val Gly Met Trp Tyr Gly Gly Ala Ser 245 250 Phe Met Tyr Val Leu Pro Ser Ser Phe His Thr Pro Lys Gln Asp Asn

260 265 Ile Phe Ser Val Phe Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu 280 285 Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Leu Arg Arg Val 295 . 300 Leu Gly Gly Arg Leu Leu Pro Glu His Ser Thr Phe 310 <210> 1837 <211> 317 <212> PRT <213> Mus musculus <400> 1837 Met Glu Phe Arg Asn Ser Thr Leu Gly Ser Gly Phe Ile Leu Val Gly 10 Ile Leu Asn Gly Ser Asp Ser Pro Glu Leu Leu Cys Ala Thr Ile Thr 25 20 Phe Leu Tyr Thr Leu Ala Leu Thr Ser Asn Gly Leu Leu Leu Val Ile Thr Val Asp Thr Arg Leu His Val Pro Met Tyr Leu Leu Gly 55 Gln Leu Ser Leu Ile Asp Leu Leu Leu Thr Ser Val Ile Thr Pro Lys Ala Val Met Asp Phe Leu Leu Arg Asp Asn Thr Ile Ser Phe Gly Gly 85 90 Cys Ala Leu Gln Met Phe Ile Glu Leu Val Leu Gly Gly Ala Glu Asp 105 Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His 120 125 Pro Leu Asn Tyr Met Ile Leu Met Ser Pro Arg Val Cys Trp Leu Met 135 140 Val Thr Ala Ser Trp Ile Leu Ser Ile Gln Met Ala Leu Gly Phe Thr 150 155 Ile Asn Thr Met His Tyr Ser Phe Cys Lys Ser Arg His Ile Arg His 170 165 Leu Phe Cys Glu Ile Pro Pro Leu Leu Asp Leu Ala Cys Ala Asp Thr 185 Ser Ser Tyr Lys Leu Val Val Tyr Leu Val Gly Val Phe Met Leu Ile 200 205 Leu Pro Leu Thr Ala Ile Phe Phe Ser Tyr Ala Arg Ile Leu Phe Thr

215 Val Leu His Met Pro Ser Asn Glu Ser Arg Lys Lys Ala Leu Val Thr 230 235 Cys Ser Ser His Met Thr Val Val Gly Met Tyr Tyr Gly Ala Leu Thr Val Met Tyr Phe Leu Pro Ser Ser Tyr His Asn Pro Lys Gln Asp Asn 260 265 Ile Leu Ser Val Phe Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu 280 Ile His Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Leu Arg Lys Val 295 Leu Gly Asn Thr Cys Cys His His Pro Ile His Leu Arg 310

```
<211> 315
<212> PRT
<213> Mus musculus
<400> 1838
Met Glu Val Phe Asn Ser Thr Leu Gly Ser Gly Phe Ile Leu Val Gly
                                  10
Ile Leu Asn Asp Ser Gly Phe Pro Glu Met Leu Cys Ala Ile Ile Ile
                              25
Ala Leu Tyr Phe Leu Ala Leu Thr Ser Asn Gly Leu Leu Leu Val
                           40
Ile Thr Met Asp Ala Arg Leu His Met Pro Met Tyr Leu Leu Trp
                       55
Gln Leu Ser Leu Met Asp Leu Leu Gln Pro Ser Val Ile Ile Pro Lys
                  70
                                      75
Ala Val Leu Asp Phe Leu Leu Lys Asp Asn Thr Ile Ser Phe Gly Gly
               85
                                  90
Cys Ala Phe Gln Met Phe Leu Ala Leu Thr Leu Gly Ser Ala Glu Asp
           100
                              105
Leu Leu Ser Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                           120
Pro Leu Asn Tyr Thr Ile Leu Met Ser Gln Lys Val Cys Tyr Leu Met
                      135
                                          140
Ile Ala Thr Ser Trp Ile Leu Ala Ser Leu Ser Ala Leu Gly Tyr Ser
                 150
                                      155
Met Tyr Thr Met Gln Tyr Pro Phe Cys Lys Ser Arg Gln Ile Arg His
               165
                                 170
Leu Phe Cys Glu Ile Pro Pro Leu Leu Lys Leu Ala Cys Gly Asp Thr
                              185
Ser Thr Tyr Glu Leu Met Val Tyr Leu Met Gly Val Thr Leu Leu Phe
       195
                           200
                                             205
Pro Ala Leu Ala Ala Ile Leu Thr Ser Tyr Ser Leu Ile Leu Leu Thr
                       215
Val Leu His Met Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Thr
                   230
                                      235
Cys Ser Ser His Leu Thr Val Val Gly Met Trp Tyr Gly Gly Ala Ile
               245
                                  250
Phe Met Tyr Ile Leu Pro Ser Ser Phe His Ser Pro Lys Gln Asp Asn
                              265
Ile Ser Ser Val Phe Tyr Met Ile Val Thr Pro Ala Leu Asn Pro Leu
                          280
                                              285
Ile Tyr Ser Leu Arg Asn Asn Glu Val Ile Glu Ala Leu Lys Arg Val
   290 295
Leu Gly Lys Lys Phe Ser Val His Ser Thr Phe
                   310
<210> 1839
<211> 318
<212> PRT
<213> Mus musculus
<400> 1839
Met Gly Gly Gly Asn Gln Thr Tyr Ile Val Glu Phe Ile Leu Leu Gly
```

10

Leu Ser Glu Asn Pro Lys Val Gln Ile Leu Leu Phe Cys Ile Phe Leu

<210> 1838

```
20
                                25
Ile Ile Tyr Phe Leu Ser Val Phe Gly Asn Leu Val Ile Ile Ile Leu
                           40
                                                4.5
Ile Gln Ile Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Lys
                        55
Asn Leu Ser Phe Ala Asp Leu Cys Phe Ser Thr Ser Ile Val Pro Gln
Met Leu Val His Phe Leu Ser Lys Arg Lys Thr Ile Ser Phe Ile Gly
                                   90
               85
Cys Ser Ile Gln Ile Val Val Phe Leu Leu Ala Gly Cys Thr Glu Cys
                               105
Ala Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Val Ala Val Cys Lys
                           120
Pro Leu His Tyr Ser Thr Ile Met Thr Gln Arg Val Cys Cys Gln Leu
                       135
                                            140
Ala Ile Val Ser Trp Ile Ser Gly Ala Phe Ala Cys Ser Val Asp Ser
                   150
                                       155
Ala Phe Thr Leu Cys Ile Pro Tyr Gln Gly Gln Asn Val Ile Asn His
                165
                                    170
Tyr Phe Cys Glu Pro Pro Ala Leu Leu Lys Leu Ala Ser Ala Asp Thr
Tyr Asn Ala Glu Met Ala Leu Phe Leu Val Gly Val Ile Ile Leu Leu
                            200
                                                205
       195
Ala Pro Val Ser Leu Ile Leu Val Ser Tyr Gly Asn Ile Ile Ser Thr
                        215
Val Ile Arg Met Gln Ser Arg Glu Gly Arg Leu Lys Val Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Thr Val Val Leu Tyr Tyr Gly Ser Gly Ile
               245
                                    250
Phe Ala Tyr Met Arg Pro Asn Ser Lys Thr Met Ser Glu Lys Asp Lys
           260
                                265
Val Val Ser Val Phe Tyr Ser Val Met Thr Ser Met Leu Asn Pro Ile
                            280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Gly Lys Leu
                        295
Val Gly Arg Leu Ser Thr Val Lys Gly Gly Ala Ala Glu Met
                    310
```

```
<210> 1840
<211> 319
<212> PRT
<213> Mus musculus
```

<400> 1840

 Met
 Glu
 Phe
 Arg
 Asn
 Ser
 Thr
 Met
 Gly
 Asn
 Gly
 Phe
 Ile
 Leu
 Val
 Gly

 Ile
 Leu
 Asp
 Asp
 Ser
 Gly
 Ala
 Pro
 Asp
 Leu
 Cys
 Ala
 Thr
 Ile
 Thr
 Ile
 Thr
 Asp
 Leu
 Leu
 Leu
 Thr
 Asp
 Ile
 Leu
 Leu
 Leu
 Ile
 Thr
 Asp
 Ile
 Ile

```
Cys Ala Leu Gln Met Phe Leu Glu Leu Val Leu Gly Ser Ala Glu Asp
           100
                               105
Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                           120
                                              125
Pro Leu Asn Tyr Met Ile Phe Met Arg Pro Ser Val Cys Trp Phe Ile
                       135
                                           140
Val Gly Thr Ile Trp Ile Leu Ala Ser Val Ile Ala Leu Gly Phe Thr
                   150
                                       155
Ile Tyr Thr Met Asn Tyr Pro Phe Cys Lys Ser Arg Gln Ile Arg His
               165
                                  170
Leu Phe Cys Glu Ile Pro Pro Leu Leu Lys Leu Ala Cys Glu Asp Thr
           180
                               185
Ser Thr Tyr Glu Leu Met Val Tyr Leu Ala Gly Val Ser Val Leu Ile
       195
                           200
                                               205
Leu Pro Leu Ala Val Ile Leu Ala Ser Tyr Val Arg Ile Leu Phe Thr
                       215
                                           220
Val Leu His Met Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Thr
                   230
                                       235
Cys Ser Ser His Leu Ile Val Val Gly Met Trp Tyr Gly Gly Ser Ser
               245
                                   250
Leu Met Tyr Val Leu Pro Ser Gln Phe His Ser Pro Lys Gln Asp Asn
                               265
Ile Leu Ser Ile Phe Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Leu Arg Arg Ile
                      295
                                          300
Phe Gly Lys Trp Leu Gly Pro Ala His Phe Leu Gly Ser Ser Phe
                   310
                                       315
```

<211> 316

<212> PRT

<213> Mus musculus

<400> 1841

Met Ala Gly Thr Asn His Thr Glu Val Ile Glu Tyr Val Leu Leu Gly 5 10 Leu Gln Asp His His Gly Leu Glu Ile Ala Leu Phe Val Leu Cys Leu 25 Gly Ile Tyr Cys Met Thr Leu Leu Gly Asn Ser Phe Leu Val Gly Leu 40 Ile Val Leu Asp Thr His Leu His Ser Pro Met Tyr Phe Phe Ile Ser 55 60 Asn Leu Ser Leu Ile Asp Ile Cys Gly Thr Ser Ser Phe Thr Pro Met 70 75 Met Leu Leu Asn Phe Leu Asp Val Gln Arg Thr Ile Ser Phe Pro Ser 90 8.5 Cys Ala Leu Gln Met Tyr Leu Thr Leu Ala Leu Gly Thr Thr Glu Cys 105 Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Gln 120 115 125 Pro Leu His Tyr Pro Glu Leu Met Asn Gly Pro Leu Cys Ile Gln Met 135 Ala Gly Ile Ser Trp Gly Thr Gly Phe Ala Asn Ser Leu Leu His Ser 155 160 145 150 Ile Leu Val Trp His Leu Pro Phe Cys Gly His Tyr Ile Ile Asn His

```
165
                               170
Phe Phe Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Gly Asp Ile
         180
                185
Ser Leu Asn Ala Leu Ile Leu Thr Val Ala Thr Ala Val Leu Thr Met
                         200
Thr Pro Leu Leu Ile Cys Leu Ser Tyr Ile Phe Ile Leu Ala Ala
                     215
                                       220
Ile Leu Arg Val Pro Ser Ala Ala Gly Arg Ser Lys Ala Phe Ser Thr
                                   235
                230
Cys Ser Ala His Leu Thr Val Val Val Ile Phe Tyr Gly Thr Ile Thr
             245
                               250
Phe Met Tyr Leu Lys Pro Lys Asp Gln Asp Pro Ser Val Gly Lys Ile
         260
               265
Ile Thr Leu Leu Tyr Ala Ile Val Ala Pro Ser Leu Asn Ala Phe Ile
     275
            280
                               285
Tyr Ser Leu Arg Asn Ser Glu Val Lys Ala Ala Val Thr Ala Leu Leu
                    295
Trp Gly Gly Leu Leu Thr Arg Lys Met Ser His Phe
                 310
```

<211> 321

<212> PRT

<213> Mus musculus

<400> 1842

Met 1	Asn	Thr	Trp	Asn 5	Tyr	Thr	Lys	Glu	Ser 10	Asp	Phe	Ile	Leu	Met 15	Gly
Leu	Thr	Asp	Ser 20	Lys	Glu	Ile	Gln	Leu 25	Val	Leu	Thr	Val	Leu 30	Phe	Val
Leu	Ile	Tyr 35	Leu	Val	Thr	Val	Leu 40	Gly	Asn	Ala	Gly	Met 45	Met	Leu	Ile
Ile	Arg 50	Leu	Asp	Ala	Gln	Leu 55	His	Thr	Pro	Met	Tyr 60	Phe	Phe	Leu	Ser
His 65	Leu	Ser	Phe	Leu	Asp 70	Leu	Ser	Tyr	Ser	Thr 75	Val	Ile	Thr	Pro	Lys 80
Thr	Leu	Gln	Asn	Leu 85	Leu	Thr	Ser	Thr	Lys 90	Val	Ile	Ser	Phe	Ile 95	Gly
Cys	Phe	Thr	Gln 100	Met	Tyr	Ala	Phe	Val 105	Leu	Leu	Ala	Ala	Ala 110	Glu	Cys
Phe	Leu	Leu 115	Ala	Ser	Met	Ala	Tyr 120	Asp	Arg	Tyr	Val	Ala 125	Ile	Cys	Asn
Pro	Leu 130	Gln	Tyr	Pro	Val	Ile 135	Met	Ser	Thr	Arg	Phe 140	Cys	Ser	Thr	Leu
Leu 145	Thr	Gly	Ser	Tyr	Met 150	Ile	Gly	Thr	Met	Asp 155	Ser	Thr	Val	Asn	Ile 160
Phe	Cys	Met	Asn	Thr 165	Leu	Tyr	Phe	Cys	Arg 170	Thr	Lys	Val	Ile	His 175	His
Phe	Phe	Cys	Asp 180	Thr	Ser	Pro	Ile	Leu 185	Ala	Leu	Ser	Cys	Ser 190	Asp	Thr
Arg	Asn	Ile 195	Gln	Ile	Ile	Ile	Phe 200	Ile	Phe	Ala	Gly	Ser 205	Thr	Leu	Val
Val	Ser 210	Leu	Ile	Thr	Ile	Ser 215	Ala	Ser	Tyr	Val	Ser 220	Ile	Leu	Ser	Thr
Ile 225	Leu	Lys	Ile	Asn	Ser 230	Thr	Ser	Gly	Lys	His 235	Lys	Ala	Phe	Ser	Thr 240

 Cys
 Ala
 Ser
 His
 Leu
 Leu
 Gly
 Val
 Thr
 Val
 Phe
 Tyr
 Gly
 Thr
 Leu
 Ile

 Phe
 Thr
 Tyr
 Leu
 Lys
 Pro
 Ser
 Asn
 Ser
 Tyr
 Tyr
 Ser
 Gly
 Lys
 Glu
 Gln

 Val
 Ala
 Ser
 Val
 Phe
 Tyr
 Thr
 Ile
 Val
 Ile
 Pro
 Met
 Leu
 Asn
 Pro
 Leu

 Ile
 Tyr
 Ser
 Leu
 Arg
 Asn
 Lys
 Glu
 Val
 Lys
 Ser
 Ala
 Ile
 His
 Arg
 Val

 Ile
 Lys
 Lys
 Gln
 Lys
 Ser
 Arg
 Leu
 Lys
 Phe
 Arg
 Val
 Ala
 Ile
 His
 Arg
 Val

 Ile
 Lys
 Lys
 Gln
 Lys
 Ser
 Arg
 Leu
 Lys
 Phe
 Arg
 Val
 Ala
 Leu
 Ser

 305
 Ile
 Lys
 Ser
 A

<210> 1843 <211> 312 <212> PRT

<213> Mus musculus

<400> 1843

Met Gln Tyr Thr Asn Tyr Thr Lys Pro Thr Glu Phe Ile Phe Ile Gly 10 Phe Thr Asp Tyr Gln Pro Ile Arg Leu Met Leu Phe Leu Val Phe Phe 25 Ile Val Tyr Thr Leu Thr Leu Val Gly Asn Ile Gly Leu Ile Ile Leu 40 Val Asn Ile Asp Leu Ser Leu Gln Thr Pro Met Tyr His Phe Leu Ser 55 Asn Leu Ser Phe Leu Asp Ile Ser Tyr Ser Thr Ala Ile Ala Pro Lys 75 70 Met Leu Val Asp Phe Leu Ala Ser Lys Lys Ser Ile Ser Phe Cys Gly 85 90 Cys Ala Ile Gln Met Phe Phe Phe Ala Cys Phe Ala Asp Ala Glu Cys 105 Leu Ile Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Asn 115 120 125 Pro Leu Leu Tyr Ser Thr Leu Val Ser Arg Arg Val Cys Phe Ser Leu 135 Val Val Leu Ala Tyr Phe Ser Gly Ser Val Thr Ser Leu Val His Val 155 150 Ser Leu Ala Phe Met Leu Pro Tyr Cys Arg Ser Asn Ile Val Asn His 170 165 Phe Phe Cys Asp Ile Pro Pro Leu Leu Ala Leu Ser Cys Ala Asp Thr 185 180 His Ile Asn Glu Leu Leu Phe Ala Leu Cys Gly Thr Ile Gln Thr 200 Ser Thr Phe Met Val Ile Leu Ile Ser Tyr Ser Cys Ile Leu Ile Thr 215 220 Val Leu Ser Ile Lys Ser Thr Gly Gly Arg Ser Lys Thr Phe Ser Thr 230 235 Cys Ala Ser His Leu Ile Ala Val Thr Leu Phe Tyr Gly Thr Leu Leu 245 250 Phe Met Tyr Leu Arg Pro Thr Thr Ser Tyr Ser Pro Asp Thr Asp Lys 265 Val Val Ala Leu Phe Tyr Thr Val Val Phe Pro Met Leu Asn Pro Ile 280 Ile Tyr Ser Phe Arg Asn Lys Asp Val Lys Asn Ala Leu Lys Lys Leu

305 and Led Gly lie Phe Arg

<210> 1844

<211> 310

<212> PRT

<213> Mus musculus

<400> 1844

Met Glu Asn Ile Thr Glu Val Thr Glu Phe Ile Leu Met Gly Phe Thr 1 5 10 15

Asp Asn Ala Asp Leu Glu Ile Leu Ser Phe Phe Leu Phe Leu Ala Ile
20 25 30

Tyr Leu Phe Thr Leu Met Gly Asn Leu Gly Leu Ile Thr Leu Val Ile
35 40 45

Gly Asp Ser Arg Leu His Asn Pro Met Tyr Tyr Phe Leu Ser Val Leu 50 55 60

Ser Ser Val Asp Ala Cys Tyr Ser Thr Val Ile Thr Pro Gln Met Val 65 70 75 80

Val Asp Phe Val Ser Glu Lys Lys Val Ile Ser Phe Ile Gly Cys Ala 85 90 95

Thr Gln Met Phe Leu Ala Val Thr Phe Gly Thr Thr Glu Cys Phe Leu 100 105 110

Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile His Asn Pro Leu 115 120 125

Met Tyr Val Val Ser Met Ser Pro Arg Val Tyr Val Pro Leu Ile Ile 130 135 140

Ala Ser Tyr Ala Gly Gly Ile Leu His Ala Val Ile His Thr Val Ala 145 150 155 160

Thr Phe Arg Leu Ser Phe Cys Gly Ser Asn Lys Ile Ser His Ile Phe 165 170 175

Cys Asp Ile Pro Pro Leu Leu Ala Ile Ser Cys Ser Asp Thr His Phe 180 185 190

Asn Gln Leu Leu Phe Tyr Cys Ala Gly Phe Ile Glu Val Val Thr
195 200 205

Ile Leu Ile Val Leu Leu Ser Tyr Gly Phe Ile Leu Ser Val Ile Leu 210 215 220

Lys Thr Arg Ser Thr Glu Gly Lys Arg Lys Val Phe Ser Thr Cys Gly 225 230 235 240

Ser His Leu Met Ala Val Ser Thr Phe His Gly Thr Val Leu Phe Met 245 250 255

Tyr Val Arg Pro Ser Asp Ser Tyr Ala Leu Glu His Asp Met Met Val 260 265 270

Ser Ile Phe Tyr Ser Ile Val Ile Pro Met Leu Asn Pro Leu Ile Tyr 275 280 285

Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Ile Lys Lys Val Phe Gly 290 295 300

Lys Arg Ile Leu Cys Gly

305 310

<210> 1845

<211> 310

<212> PRT

<213> Mus musculus

```
<400> 1845
Met Glu Asn Val Thr Val Ser Leu Phe Ile Leu Arg Gly Leu Thr Asp
                                    1.0
Asn Ala Glu Leu Gln Ile Ser Leu Phe Phe Leu Phe Leu Met Ile Tyr
Leu Phe Thr Leu Met Gly Asn Ile Gly Leu Ile Ser Val Val Ile Gly
Asp Ser Gln Leu His Asn Pro Met Tyr Tyr Phe Leu Gly Val Leu Ser
                        55
Phe Ile Asp Thr Cys Phe Ser Thr Ile Ile Thr Pro Lys Met Leu Ile
                    70
Asp Phe Met Ser Lys Arg Lys Val Ile Ser Phe Leu Gly Cys Val Ala
               8.5
                                    90
Gln Met Phe Leu Ala Val Ser Cys Gly Thr Thr Glu Cys Phe Leu Leu
                               105
Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Tyr Asn Pro Leu Leu
                            120
Tyr Ala Val Asn Met Ser Pro Arg Val Tyr Met Ser Leu Ile Ile Ala
                        135
Ser Asn Val Gly Gly Ile Leu His Ala Ser Ile His Thr Ala Ala Thr
                   150
                                        155
Ala Ser Leu Ser Phe Cys Asp Ser Asn Glu Ile Lys His Phe Phe Cys
                                    170
Asp Ile Pro Pro Leu Leu Ala Ile Ser Cys Ser Asp Thr Lys Met Asn
                                185
           180
Glu Leu Leu Phe Ile Phe Val Ser Ser Ile Glu Val Val Thr Ile
                            200
                                                205
Leu Ile Ile Ile Val Ser Tyr Ser Phe Ile Leu Phe Ala Ile Leu Lys
                       215
                                            220
Met His Ser Ala Glu Gly Arg Pro Lys Val Phe Ser Thr Cys Gly Ser
                    230
                                        235
His Leu Thr Gly Val Ser Ile Tyr Tyr Gly Thr Ile Phe Phe Met Tyr
                                    250
Met Arg Pro Ser Ser Ser Tyr Thr Leu Glu His Asp Met Ile Val Ser
                                265
Thr Phe Tyr Ala Val Val Ile Pro Met Leu Asn Pro Ile Ile Tyr Ser
                           280
                                               285
Leu Arg Asn Lys Asp Val Lys Lys Ala Met Lys Arg Leu Leu Ala Lys
                       295
Val Phe Met Ser Ile Arg
<210> 1846
<211> 313
<212> PRT
<213> Mus musculus
<400> 1846
Met Glu Lys Gln Asn Leu Thr Val Leu Ser Glu Phe Ile Leu Lys Gly
                                    10
```

Ile Thr Asp Arg Pro Glu Leu Gln Ala Pro Leu Phe Gly Leu Leu Phe 20 25 30 Ile Ile Tyr Leu Ile Ser Ala Val Gly Asn Leu Gly Ile Ile Ile Ile

Thr Asn Val Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Lys

```
50
                       55
His Leu Ala Phe Thr Asp Leu Gly Tyr Ser Thr Ala Ile Gly Pro Lys
                   70
                                       75
Met Leu Val Asn Phe Val Ala Glu His Asn Ser Val Ser Tyr Tyr Leu
                                   90
Cys Ala Thr Gln Leu Ala Cys Phe Leu Leu Phe Ile Thr Cys Glu Leu
           100
                               105
Phe Ile Leu Ser Ser Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                           120
Pro Leu Leu Tyr Thr Val Ile Met Ser Gln Arg Ile Cys Trp Val Leu
                       135
                                            140
Val Ala Val Pro Tyr Ile Tyr Ser Val Phe Val Ser Leu Ile Val Thr
                  150
                                       155
Ile Arg Leu Phe Thr Leu Ser Phe Cys Gly Tyr Asn Ile Ile Asn His
                                   170
               165
Phe Phe Cys Asp Cys Ile Pro Leu Ile Ser Leu Leu Cys Ser Asn Thr
                               185
His Glu Val Glu Val Ile Ile Arg Phe Phe Ala Thr Phe Asp Leu Ile
                            200
Ser Ser Leu Leu Val Val Leu Val Ser Tyr Leu Phe Ile Leu Ile Thr
                        215
Ile Leu Arg Met Lys Ser Ala Ala Gly Arg Arg Lys Ala Phe Ser Thr
                                        235
                    230
Cys Gly Ser His Leu Thr Val Val Ile Val Phe Tyr Gly Thr Leu Ile
               245
                                   250
Phe Met Tyr Val Gln Pro Lys Ser Ser Gln Thr Phe Glu Thr Asp Lys
           260
                               265
Val Ser Ser Ile Phe Tyr Thr Leu Val Ile Pro Met Leu Asn Pro Leu
                                               285
        275
                           280
Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Asp Ala Ile Glu Arg Thr
                       295
Trp Glu Lys Ile Val Thr Ser Phe Ser
                    310
```

<211> 315

<212> PRT

<213> Mus musculus

<400> 1847

Met Pro Ser Leu Asn Asn Thr Ala Val Met Asp Phe Ile Leu Val Gly 10 Leu Thr Asp Ser Pro Val Leu Gly Arg Ile Leu Phe Val Val Phe Leu 20 25 Val Ile Tyr Leu Ile Thr Leu Thr Gly Asn Leu Cys Met Ile Val Leu Ile Arg Thr Asn Ser His Leu Gln Thr Pro Met Tyr Phe Phe Leu Gly 55 His Leu Ser Phe Val Asp Ile Cys Tyr Ser Ser Asn Val Thr Pro Asn 70 7.5 Met Leu His Gly Phe Ile Ser Asp Gln Lys Ile Ile Ser Tyr Ala Gly 90 85 Cys Phe Thr Gln Cys Leu Leu Phe Ile Ala Leu Val Ile Thr Glu Phe 105 110 Tyr Leu Leu Ala Ser Met Ala Leu Asp Arg Tyr Val Ala Ile Cys Ser 120

```
Pro Leu His Tyr Ser Thr Arg Met Ser Lys Asn Val Cys Phe Ser Leu
                      135
Val Ser Phe Ser Tyr Val Phe Gly Phe Leu Asn Gly Leu Ser Gln Thr
                                     155
                  150
Leu Leu Thr Phe His Leu Ser Phe Cys Gly Ser His Glu Ile Asn His
                                 170
              165
Phe Tyr Cys Ala Asp Pro Pro Leu Ile Met Leu Ala Cys Ser Asp Thr
                             185
His Val Lys Lys Met Ala Met Phe Val Val Ala Gly Phe Thr Leu Ile
                          200
      195
Ser Ser Leu Ser Ile Ile Leu Phe Ser Tyr Leu Tyr Ile Phe Ala Ala
   210 215
                                        220
Ile Met Arg Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Phe Ser Thr
                                     235
                  230
Cys Gly Ser His Leu Thr Thr Val Thr Ile Phe Tyr Gly Thr Leu Phe
              245
                                 250
Cys Met Tyr Leu Lys Pro Pro Ser Glu Arg Ser Ile Glu Glu Ser Lys
                              265
Val Ile Ala Val Phe Tyr Thr Phe Leu Ser Pro Phe Leu Asn Pro Leu
                          280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Ile Asn Ala Met Lys Gln Val
  290 295
Ile Lys Gly Asn Phe Cys Gln Lys Ile Leu Val
                  310
```

<210> 1848 <211> 318 <212> PRT

<213> Mus musculus

<400> 1848

Met Leu Ala Pro Lys Lys Met Val Arg Gly Asn Tyr Ser Met Val Thr 10 Glu Phe Ile Leu Gly Leu Thr Asp Arg Pro Glu Leu Gln Pro Leu 25 Leu Phe Val Leu Phe Leu Val Ile Tyr Leu Ile Thr Val Gly Gly Asn Leu Gly Met Met Val Leu Ile Arg Ile Asp Ser Arg Leu His Thr Pro 55 Met Tyr Tyr Phe Leu Ala Ser Leu Ser Cys Leu Asp Leu Cys Tyr Ser 75 Thr Asn Val Thr Pro Lys Met Leu Val Asn Phe Leu Ser Glu Lys Lys 90 8.5 Thr Ile Ser Tyr Ala Ala Cys Leu Val Gln Cys Tyr Phe Phe Ile Ala 105 Met Val Ile Thr Glu Tyr Tyr Met Leu Ala Val Met Ala Tyr Asp Arg 120 Tyr Met Ala Ile Cys Asn Pro Leu Leu Tyr Ser Ser Lys Met Ser Lys 135 140 Gly Val Cys Val Arg Leu Ile Ala Gly Pro Tyr Ile Tyr Gly Phe Leu 150 155 Ser Gly Leu Met Glu Thr Met Trp Thr Tyr Arg Leu Thr Phe Cys Gly 170 165 Ser Asn Ile Ile Asn His Phe Tyr Cys Ala Asp Pro Pro Leu Ile Arg 185 Leu Ser Cys Ser Asp Thr Phe Ile Lys Glu Thr Ser Met Phe Val Val

```
200
     195
Ala Gly Phe Asn Leu Ser Asn Ser Leu Phe Ile Ile Leu Ile Ser Tyr
 210 215 220
Leu Phe Ile Leu Ile Ala Ile Leu Arg Met Arg Ser Ala Glu Gly Arg
                230
                                 235
Arg Lys Ala Phe Ser Thr Cys Gly Ser His Leu Val Ala Val Thr Val
            245
                              250.
Phe Tyr Gly Thr Leu Phe Cys Met Tyr Val Arg Pro Pro Thr Asp Lys
                265
Ser Val Glu Gln Ser Lys Ile Ile Ala Val Phe Tyr Thr Phe Val Ser
                      280
Pro Met Leu Asn Pro Ile Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys
290 295 300
His Ala Phe Trp Lys Leu Val Arg Arg Asn Val Leu Ser Lys
              310
                               315
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1849															
Met 1	Thr	Phe	Leu	Asn 5	His	Thr	Ala	Met	Met 10	Asp	Phe	Ile	Leu	Met 15	Gly
Leu	Thr	Asp	Ser 20	Pro	Val	Leu	Gly	Arg 25	Ile	Leu	Phe	Val	Val 30	Phe	Leu
Val	Ile	Phe 35	Val	Ile	Thr	Leu	Ala 40	Gly	Asn	Leu	Phe	Met 45	Ile	Val	Leu
Ile	Arg 50	Thr	Asn	Ser	His	Leu 55	Gln	Thr	Pro	Met	Tyr 60	Phe	Phe	Leu	Gly
His 65	Leu	Ser	Phe	Val	Asp 70	Ile	Cys	Tyr	Ser	Ser 75	Asn	Val	Thr	Pro	Asn 80
Met	Leu	His	Gly	Phe 85	Ile	Ser	Asp	Gln	Lys 90	Thr	Ile	Ser	Tyr	Ala 95	Gly
Cys	Phe	Thr	Gln 100	Cys	Leu	Leu	Phe	Ile 105	Ala	Leu	Val	Ile	Thr 110	Glu	Phe'
Tyr	Leu	Leu 115	Ala	Ser	Met	Ala	Leu 120	Asp	Arg	Tyr	Val	Ala 125	Ile	Cys	Ser
Pro	Leu 130	His	Tyr	Ser	Thr	Arg 135	Met	Ser	Lys	Asn	Val 140	Cys	Val	Ser	Leu
Val 145	Ala	Phe	Pro	Tyr	Val 150	Phe	Gly	Phe	Leu	Asn 155	Gly	Leu	Ser	Gln	Thr 160
Leu	Leu	Thr	Phe	His 165	Leu	Ser	Phe	Cys	Gly 170	Ser	His	Glu	Ile	Asn 175	His
Phe	Tyr	Cys	Ala 180	Asp	Pro	Pro	Leu	Ile 185	Met	Leu	Ala	Cys	Ser 190	Asp	Thr
His	Val	Lys 195	Lys	Met	Ala	Met	Phe 200	Val	Val	Ala	Gly	Phe 205	Thr	Leu	Ser
Ser	Ser 210	Leu	Ala	Ile	Ile	Leu 215	Leu	Ser	Tyr	Leu	Phe 220	Ile	Phe	Ile	Ala
Ile 225	Leu	Arg	Ile	Arg	Ser 230	Ala	Lys	Gly	Arg	Gln 235	Lys	Ala	Phe	Ser	Thr 240
Cys	Gly	Ser	His	Met 245	Thr	Thr	Val	Thr	Ile 250	Phe	Tyr	Gly	Thr	Leu 255	Phe
Cys	Met	Tyr	Leu 260	Arg	Pro	Pro	Ser	Glu 265		Ser	Val	Glu	Glu 270		Lys

Val Ile Ala Val Phe Tyr Thr Phe Leu Ser Pro Met Leu Asn Pro Leu 280 Ile Tyr Ser Leu Arg Asn Lys Asp Val Ile Asn Ala Met Lys Gln Val 295 Val Lys Gly Lys Leu Leu His <210> 1850 <211> 311 <212> PRT <213> Mus musculus

<400> 1850 Met Asp His Met Lys Ile Asn Phe Thr Val Thr Glu Phe Val Phe Leu 10 Gly Leu Ser Ser Asp Pro Lys Val Gln Leu Val Leu Phe Phe Val Phe 25 Leu Phe Phe Tyr Met Leu Ser Val Val Gly Asn Ile Ile Ile Thr Ile Ile Gln Ile Glu Pro Arg Leu Lys Thr Pro Met Tyr Phe Phe Leu 55 Ala Asn Leu Ser Phe Leu Asp Ile Cys Tyr Thr Ser Thr Asn Val Pro 70 75 Gln Met Leu Ser Asn Met Val Gly Ser Lys Lys Thr Ile Pro Phe Val 85 90 Ser Cys Ala Thr Gln Met Tyr Phe Ser Leu Ser Phe Gly Met Ile Glu 105 Cys Val Leu Leu Gly Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys 125 115 120 His Pro Leu His Tyr Thr Val Ile Met Asp Gln Asn Thr Cys Val Gln 135 Leu Ala Ala Ile Ser Trp Ser Ser Ser Phe Leu Ser Ser Met Val Ile 150 155 Asn Val Leu Thr Leu Ser Leu Pro Tyr Cys Gly Pro Asn Val Leu Asn 165 170 His Phe Phe Cys Glu Val Pro Ser Val Leu Arg Leu Ala Cys Thr Asp 180 185 Thr Ser Leu Thr Glu Leu Val Val Phe Val Phe Ser Ile Ile Val 200 Phe Ile Pro Phe Leu Leu Ile Ile Val Ser Tyr Ala Arg Ile Leu Leu 215 220 Ser Val Leu Arg Met Arg Ser Ala Ser Gly Arg His Lys Ala Leu Ser 230 235 Thr Cys Ala Ser His Leu Thr Val Val Thr Leu Phe Tyr Gly Thr Ala 245 250 Ile Phe Met Tyr Met Arg Pro Gln Ser Lys Ser Ser Arg Ala Gly Gly 265 Lys Val Ile Ala Val Phe Tyr Thr Val Val Thr Pro Met Leu Asn Pro 280 Leu Ile Tyr Ser Leu Arg Asn Gln Asp Val Lys Gly Ser Leu Arg Arg 295 Ala Ile Thr Lys Gln Lys Thr 310

```
<213> Mus musculus
<400> 1851
Met Asp Glu Asp Asn Asn Ser Thr Val His Gln Phe Ile Leu Val Gly
Leu Thr Asp Asp Pro Glu Leu Glu Val Ile Leu Phe Ala Val Phe Leu
                                25
Val Ile Tyr Leu Thr Thr Val Leu Gly Asn Leu Gly Leu Ile Met Leu
                           40
Ile Gln Val Ser Pro Gln Leu His Thr Pro Met Tyr Phe Phe Leu Cys
                       55
His Leu Ala Phe Val Asp Phe Cys Tyr Thr Ser Ser Val Thr Pro Asn
                   70
                                        75
Thr Ile Ile Asn Phe Leu Arg Asp Ile Lys Ser Ile Thr Phe Tyr Ala
                                    90
Cys Ala Thr Gln Val Cys Cys Phe Ile Thr Phe Ala Val Cys Glu Met
                                105
Tyr Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Trp Asn
                            120
Pro Leu Leu Tyr Val Val Leu Met Pro Lys Lys Leu Cys Leu Arg Val
                        135
                                           140
Ile Ala Ser Thr Tyr Ile Tyr Gly Phe Thr Val Gly Leu Ala Gln Ala
                   150
                                        155
Val Ala Thr Phe Arg Leu Ser Phe Cys Gly Ser Asn Val Ile Asn His
               165
                                    170
Phe Tyr Cys Asp Asp Val Pro Leu Val Ala Leu Ala Cys Ser Asp Thr
           180
                               185
                                                    190
His Val Lys Glu Leu Met Leu Leu Ile Ile Ala Gly Phe Asn Thr Leu
                           200
                                               205
Cys Ser Leu Val Ile Val Val Ile Ser Tyr Ile Cys Ile Leu Phe Ala
                                            220
                        215
Ile Leu Arg Ile His Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Thr Ser Ile Thr Ile Phe Tyr Gly Thr Ile Ile
                                    250
               245
Phe Met Tyr Leu Gln Pro Lys Ser Ser His Ser Leu Asn Thr Asp Lys
                               265
Phe Val Ser Val Phe Tyr Val Val Ile Pro Met Leu Asn Pro Leu
                           280
        275
                                                285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asn Ala Leu Lys Arg Phe
                       295
Thr Glu Lys Leu Ser Leu Thr Ile His Asp Ser Arg Lys Ser Glu
                    310
                                        315
<210> 1852
<211> 307
<212> PRT
<213> Mus musculus
<400> 1852
Met Leu Lys Lys Asn Phe Thr Thr Val Thr Glu Phe Ile Phe Leu Gly
                                    10
Leu Thr Asp Arg Ala Glu Leu Gln Pro Val Leu Phe Val Val Phe Leu
            20
                                25
```

<211> 319 <212> PRT

```
Leu Ile Tyr Leu Ile Thr Val Thr Gly Asn Val Ser Met Ile Phe Leu
                            40
Ile Arg Ser Asp Ser Lys Leu His Thr Pro Met Tyr Phe Phe Leu Ser
His Leu Ser Phe Val Asp Leu Cys Tyr Ala Thr Thr Val Ala Pro Gln
Met Leu Val Asn Phe Leu Ser Lys Arg Lys Asn Ile Ser Phe Ile Gly
                                    90
                85
Cys Ile Ile Gln Phe His Phe Phe Ile Ala Leu Val Ile Thr Asp Tyr
                               105
Tyr Met Leu Ala Val Met Ala Tyr Asp Cys Tyr Val Ala Ile Cys Lys
                           120
Pro Leu Leu Tyr Thr Ser Lys Met Ser Arg Arg Val Cys Leu Ser Leu
                                           140
                       135
Val Ala Thr Gln Tyr Ile Tyr Gly Phe Val Asn Gly Leu Ile Gln Thr
                   150
                                       155
Ile Leu Met Leu Arg Leu Thr Phe Cys Gly Pro Asn Glu Ile Asn His
                165
                                    170
Phe Tyr Cys Ala Asp Pro Pro Leu Met Val Leu Ala Cys Ser Asp Thr
                                185
Tyr Val Lys Lys Thr Ala Met Phe Val Val Ala Gly Ser Asn Leu Thr
                           200
Cys Ser Leu Thr Ile Ile Leu Ile Ser Tyr Ile Phe Ile Phe Thr Ala
                       215
Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Phe Ser Thr
                   230
                                        235
Cys Gly Ser His Leu Thr Ala Val Thr Ile Phe Tyr Gly Thr Leu Phe
                245
                                   250
Cys Met His Leu Arg Pro Pro Ser Glu Thr Ser Val Glu Gln Gly Lys
           260
                               265
Ile Val Ala Val Phe Tyr Ile Phe Val Ser Pro Met Leu Asn Pro Phe
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asn Ala Ile Arg Lys Val
    290
                        295
Ile Gln Lys
305
```

<210> 1853 <211> 319 <212> PRT <213> Mus musculus

<400> 1853

 Met
 Ala
 Gln
 Ile
 Asn
 Cys
 Thr
 Gln
 Val
 Thr
 Glu
 Phe
 Ile
 Leu
 Val
 Gly

 Leu
 Thr
 Asp
 Arg
 Lys
 Glu
 Leu
 Lys
 Met
 Pro
 Leu
 Phe
 Val
 Phe
 Leu

 Phe
 Ile
 Tyr
 Leu
 Phe
 Thr
 Ala
 Ile
 Gly
 Asn
 Leu
 Gly
 Leu
 Ile
 Leu
 Val

 Ile
 Arg
 Thr
 Asp
 Ala
 Arg
 Leu
 Asn
 Thr
 Pro
 Met
 Tyr
 Phe
 Phe
 Leu
 Ser

 Asn
 Leu
 Ala
 Phe
 Leu
 Tyr
 Ser
 Ser
 Val
 Ile
 Thr
 Pro
 Lys

 65
 Tyr
 Tyr
 Ser
 Ser
 Val
 Ile
 Thr
 Phe
 Asn
 Ala

 Met
 Leu
 Gly
 Asn
 Phe
 Leu
 Tyr
 Ser
 Lys
 Asn
 Ala
 Ile
 Ser
 Ph

```
100
                               105
Leu Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Asn
                           120
Pro Leu Leu Tyr Met Val Thr Met Ser Pro Gly Ile Cys Ile Gln Leu
                       135
                                            140
Val Val Pro Tyr Ser Tyr Ser Phe Leu Met Ala Leu Ile His Thr
                   150
                                        155
Leu Leu Thr Phe Arg Leu Ser Tyr Cys His Ser Asn Ile Ile Asn His
                                   170
Phe Tyr Cys Asp Asp Met Pro Leu Leu Arg Leu Thr Cys Ser Asp Thr
                               185
           180
His Tyr Lys Gln Leu Ser Ile Leu Ala Cys Ala Gly Ile Thr Phe Ile
       195
                           200
                                                205
Ser Ser Val Leu Ile Val Ser Val Ser Tyr Met Phe Ile Ile Ser Ala
                       215
                                           220
Ile Leu Arg Met Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                   230
                                        235
Cys Ser Ser His Met Met Ala Val Ser Ile Phe Tyr Gly Thr Leu Ile
               245
                                    250
Phe Met Tyr Leu Gln Pro Ser Ser Asp His Ser Leu Asp Thr Asp Lys
           260
                               265
Met Ala Ser Val Phe Tyr Thr Val Ile Ile Pro Met Leu Asn Pro Leu
                           280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Ala Leu Lys Arg Val
                       295
Met Asp Asn Arg Asn Gln Thr Ser Ile Phe Arg Glu Leu Arg Lys
                   310
                                        315
```

<211> 316

<212> PRT

<213> Mus musculus

<400> 1854

Met Glu Lys Ser Asn His Ser Ala Arg Ile Gln Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Asn Asn Pro Gly Leu Lys Ala Pro Leu Phe Val Ile Phe Leu Ile Ile Tyr Leu Val Thr Leu Met Gly Asn Leu Gly Met Val Ile Leu Thr His Val Asp Ser Lys Leu His Thr Pro Met Tyr Phe Phe Leu Arg His Leu Ser Ile Thr Asp Leu Gly Tyr Ser Thr Val Ile Gly Pro Lys Met Met Val Asn Phe Val Met Gln Gln Ásn Ile Ile Ser Tyr Thr Gly Cys Ala Val Gln Leu Thr Phe Phe Glu Ile Phe Ile Ile Thr Glu Leu Phe Ile Leu Ser Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Leu Tyr Val Ile Ile Met Ala Gly Lys Val Arq Trp Gly Leu Val Leu Val Pro Tyr Leu Tyr Ser Leu Phe Val Ser Leu Leu Leu Thr Val Lys Leu Phe Thr Leu Ser Phe Cys Gly Ser Asn Thr

```
Ile Ser Tyr Phe Tyr Cys Asp Cys Val Pro Leu Ile Ser Leu Leu Cys
           180
                              185
Ser Asp Thr His Glu Leu Glu Leu Ile Ile Leu Ile Phe Ser Gly Cys
                           200
                                               205
Asn Leu Leu Ser Ser Leu Leu Ile Val Leu Val Ser Tyr Met Phe Ile
                       215
                                           220
Phe Val Ala Ile Leu Arg Met Asn Ser Lys Glu Gly Arg Ser Lys Ala
                  230
                                      235
Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Val Phe Tyr Gly
               245
                                  250
Thr Leu Leu Phe Ile Tyr Leu Gln Pro Lys Ser Ser His Thr Phe Glu
                              265
Ile Asp Lys Met Ala Ser Val Phe Tyr Thr Leu Val Ile Pro Met Leu
      275
                          280
                                              285
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Glu Ala Leu
                      295
Lys Arg Thr Leu Thr Gln Gly Leu Arg Ile His Thr
                   310
```

<210> 1855 <211> 317 <212> PRT

<213> Mus musculus

<400> 1855

Met 1	Val	Arg	Thr	Met 5	Lys	Gly	Ile	Gln	Asp 10	Lys	Asn	Ala	Thr	Glu 15	Val
Thr	Glu	Phe	Ile 20	Leu	Leu	Gly	Leu	Ser 25	Glu	Asn	Pro	Asp	Leu 30	Gln	Gly
Val	Leu	Phe 35	Ala	Leu	Phe	Leu	Ile 40	Ile	Tyr	Thr	Met	Thr 45	Leu	Val	Gly
Asn	Leu 50	Gly	Met	Met	Ala	Leu 55	Ile	Lys	Ile	Asp	Arg 60	Ser	Leu	His	Thr
Pro 65	Met	Tyr	Phe	Phe	Leu 70	Ser	Ser	Leu	Ser	Phe 75	Val	Asp	Ala	Ser	Ser 80
Ser	Ser	Thr	Val	Thr 85	Pro	Lys	Met	Leu	Leu 90	Asn	Leu	Val	Ala	Glu 95	Asp
Lys	Ser	Ile	Ser 100	Phe	Asn	Gly	Суѕ	Ala 105	Thr	Gln	Phe	Phe	Phe 110	Phe	Gly
Ser	Phe	Leu 115	Gly	Thr	Glu	Cys	Phe 120	Leu	Leu	Ala	Met	Met 125	Ala	Tyr	Asp
Arg	Tyr 130	Ala	Ala	Ile	Trp	Asn 135	Pro	Leu	Leu	Tyr	Pro 140	Val	Leu	Met	Ser
145			Cys		150					155				_	160
Gly	Asn	Ala	Ala	Ile 165	His	Thr	Gly	Met	Thr 170	Phe	Arg	Leu	Ser	Phe 175	Cys
Gly	Ser	Asn	Lys 180	Ile	Asn	His	Phe	Tyr 185	Cys	Asp	Thr	Pro	Pro 190	Leu	Leu
Lys	Leu	Ser 195	Cys	Ser	Asp	Ile	His 200	Ile	Asn	Gly	Ile	Val 205	Ile	Met	Ala
Phe	Ser 210	Ser	Phe	Thr	Val	Leu 215	Ile	Cys	Val	Leu	Ile 220	Val	Leu	Ile	Ser
Tyr 225	Leu	Cys	Ile	Leu	Ile 230	Ala	Ile	Leu	Lys	Met 235	Pro	Ser	Ala	Glu	Gly 240
Arg	His	Lys	Ala	Phe	Ser	Thr	Cys	Ala	Ser	His	Leu	Met	Ala	Val	Thr

```
245
                                    250
Ile Phe Phe Gly Ser Ile Leu Phe Met Tyr Leu Arg Pro Thr Thr Ser
            260
                                265
Tyr Ser Met Glu Gln Asp Lys Ile Val Ser Val Phe Tyr Thr Val Val
                            280
                                               285
Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Lys Asn Arg Asp Val
                       295
Lys Glu Ala Val Lys Lys Ile Leu Gln Lys His Ile Leu
                    310
<210> 1856
<211> 317
<212> PRT
<213> Mus musculus
<400> 1856
Met Val Arg Ser Gly Lys Gly Ile Gln Asn Lys Asn Ala Thr Glu Val
Thr Glu Phe Ile Leu Leu Gly Leu Ser Asp Asn Pro Asp Leu Gln Gly
Val Leu Phe Ala Leu Phe Leu Ile Ile Tyr Thr Met Thr Leu Val Gly
Asn Leu Gly Met Met Ala Leu Ile Lys Ile Asp Arg Ser Leu His Thr
Pro Met Tyr Phe Phe Leu Ser Ser Leu Ser Phe Val Asp Ala Ser Tyr
                                        75
Ser Ser Ser Val Thr Pro Lys Met Leu Val Asn Leu Met Ala Glu Asp
               85
                                    90
Lys Ser Ile Ser Phe Asn Gly Cys Ala Thr Gln Phe Phe Phe Gly
           100
                               105
Ser Phe Leu Gly Thr Glu Cys Phe Leu Leu Ala Met Met Ala Tyr Asp
                            120
Arg Tyr Ala Ala Ile Trp Asn Pro Leu Leu Tyr Pro Val Leu Met Ser
                       135
Gly Arg Ile Cys Phe Met Leu Val Ser Thr Ser Phe Leu Ala Gly Phe
                   150
                                        155
Gly Asn Ala Ala Ile His Thr Gly Met Thr Phe Arg Leu Ser Phe Cys
               165
                                   170
Gly Ser Asn Lys Ile Asn His Phe Tyr Cys Asp Thr Pro Pro Leu Leu
                               185
                                                    190
Lys Leu Ser Cys Ser Asp Thr His Ile Asn Gly Ile Val Ile Met Ala
                            200
Phe Ser Ser Phe Asn Val Ile Ser Cys Val Leu Ile Val Leu Ile Ser
                       215
                                            220
Tyr Leu Cys Ile Leu Ile Ala Ile Leu Lys Met Pro Ser Ala Glu Gly
                   230
                                        235
Arg His Lys Ala Phe Ser Thr Cys Ala Ser His Leu Met Ala Val Thr
                                    250
Ile Phe Phe Gly Thr Ile Leu Phe Met Tyr Leu Arg Pro Thr Ser Ser
                                265
Tyr Ser Met Glu Gln Asp Lys Val Val Ser Val Phe Tyr Thr Val Val
                            280
Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Lys Asn Lys Asp Val
                       295
Lys Lys Ala Val Lys Lys Ile Leu His Asn Tyr Val Val
```

310

```
<211> 310
<212> PRT
<213> Mus, musculus
<400> 1857
Met Leu Asn Phe Thr Asp Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
                                    10
Ser Arg Lys Glu Leu Gln Val Leu Phe Phe Val Ile Phe Leu Met Val
                                25
Tyr Ile Val Thr Met Val Gly Asn Ile Gly Met Met Ile Leu Ile Lys
                           40
                                                45
Ile Ser Pro Gln Leu Ser Ser Pro Met Tyr Phe Phe Leu Ser His Leu
                        55
Ser Phe Val Asp Val Trp Phe Ser Ser Asn Val Thr Pro Lys Met Leu
                    70
                                        75
Glu Asn Leu Leu Ser Lys Thr Lys Thr Ile Ser Tyr Ala Gly Cys Leu
                                    90
Val Gln Cys Phe Phe Phe Ile Ala Leu Val His Val Glu Ile Phe Ile
            100
                                105
Leu Ala Val Met Ala Phe Asp Arg Tyr Met Ala Ile Gly Lys Pro Leu
                           120
Leu Tyr Gly Ser Lys Met Ser Arg Val Val Cys Ile Arg Leu Ile Ser
                       135
                                           140
Phe Pro Tyr Ile Tyr Gly Phe Leu Thr Ser Leu Ala Ala Thr Leu Trp
                   150
                                        155
Thr Tyr Gly Leu Tyr Phe Cys Gly Lys Thr Glu Ile Asn His Phe Tyr
               165
                                   170
Cys Ala Asp Pro Pro Leu Ile Lys Met Ala Cys Ala Gly Thr Phe Val
                                185
Lys Glu Tyr Thr Met Ile Ile Leu Ala Gly Ile Asn Phe Thr Tyr Ser
        195
                            200
Leu Ser Val Val Ile Ile Ser Tyr Leu Phe Ile Leu Ile Ala Ile Leu
                        215
                                            220
Arg Met Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys Gly
                    230
                                        235
Ser His Leu Thr Ala Val Val Ile Phe Tyr Gly Thr Leu Ile Phe Met
                                    250
                245
Tyr Leu Arg Arg Pro Thr Glu Glu Ser Val Glu Lys Gly Lys Met Val
                                265
Ala Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Met Ile Tyr
                           280
                                               285
Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Met Asp Lys Val Ile Ser
                       295
Arg Lys Gly Leu Thr Lys
305
                    310
<210> 1858
<211> 310
<212> PRT
<213> Mus musculus
```

Met Leu Asn Phe Thr Asp Val Thr Glu Phe Val Leu Leu Gly Leu Thr

<210> 1857

<400> 1858

```
10
Arg Arg Lys Glu Leu Gln Val Leu Phe Phe Val Ile Phe Leu Met Val
                                25
Tyr Ile Val Thr Met Val Gly Asn Ile Gly Met Met Ile Leu Ile Lys
Ile Ser Pro Gln Leu Ser Ser Pro Met Tyr Phe Phe Leu Ser His Leu
Ser Phe Ile Asp Val Trp Phe Ser Ser Asn Val Thr Pro Lys Met Leu
                   70
                                        75
Glu Asn Leu Leu Ser Lys Thr Lys Thr Ile Ser Tyr Ala Gly Cys Leu
                                    90
               85
Val Gln Cys Phe Phe Phe Ile Ala Leu Val His Val Glu Ile Phe Ile
            100
                               105
Leu Ser Val Met Ala Phe Asp Arg Tyr Met Ala Ile Gly Lys Pro Leu
       115
                           120
                                                125
Leu Tyr Gly Ser Lys Met Ser Arg Val Val Cys Ile Arg Leu Ile Ser
                       135
Phe Pro Tyr Ile Tyr Gly Phe Leu Thr Ser Leu Ala Ala Thr Leu Trp
                    150
                                        155
Thr Tyr Gly Leu Tyr Phe Cys Gly Lys Thr Glu Ile Asn His Phe Tyr
                                    170
Cys Ala Asp Pro Pro Leu Ile Lys Met Ala Cys Ala Gly Thr Phe Val
                                185
Lys Glu Tyr Thr Met Leu Phe Leu Ala Gly Ile Asn Phe Thr Tyr Ser
                            200
Leu Ile Val Val Ile Ile Ser Tyr Leu Phe Ile Leu Ile Ala Ile Leu
                        215
                                            220
Arg Met Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr Cys Gly
                                        235
                    230
Ser His Leu Thr Ala Val Gly Ile Phe Tyr Gly Thr Leu Ile Phe Met
                245
                                    250
Tyr Leu Arg Arg Pro Thr Glu Glu Ser Val Glu Gln Gly Lys Met Val
                                265
Ala Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Met Ile Tyr
                            280
Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Met Asp Lys Val Ile Ala
                        295
Lys Lys Phe Leu Thr Lys
305
<210> 1859
<211> 314
<212> PRT
<213> Mus musculus
<400> 1859
Met Ala Lys Ser Asn His Ser Val Val Thr Glu Phe Ile Leu Leu Gly
                                    10
Leu Thr Glu Asp Pro Glu Leu Gln Ile Ile Leu Phe Val Ile Leu Leu
                                2.5
Ile Ile Tyr Leu Phe Ser Val Met Ser Asn Leu Gly Leu Val Val Leu
                           40
Ile Gln Ile Ser Pro Gln Leu Gln Ser Pro Met Tyr Phe Phe Leu Ser
                        55
                                            60
```

His Leu Ala Phe Val Asp Phe Cys Tyr Thr Ser Cys Val Thr Pro Asn

Ala Leu Val Asn Phe Leu Arg Glu Ile Lys Ser Ile Ser Phe Tyr Gly 85 90 Cys Ala Ala Gln Val Cys Phe Phe Thr Thr Phe Ser Val Cys Glu Val 105 Phe Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Leu Tyr Val Ile Leu Met Pro Arg Arg Leu Cys Ile Gln Ile 135 140 Ala Ile Thr Thr Tyr Ile Tyr Ala Phe Val Thr Ala Leu Ile Gln Thr 155 Val Thr Thr Phe Ile Leu Ser Phe Cys Asp Ser Asn Leu Val Asn His 165 170 Phe Phe Cys Glu Asp Ile Pro Leu Met Ala Leu Ala Cys Ser Asn Thr 180 185 Gln Val Lys Glu Leu Leu Leu Ser Met Ala Gly Phe Asn Val Cys 200 195 205 Cys Ser Leu Leu Ile Val Leu Ile Ser Tyr Leu Phe Ile Val Ser Ala 215 220 Ile Leu Lys Lys His Ser Gly Glu Gly Arg Gln Lys Val Phe Ser Thr 230 Cys Ala Ser His Leu Ser Ser Ile Ala Ile Tyr Tyr Gly Thr Ile Ile 245 250 Phe Met Tyr Leu Gln Pro Glu Ser Ser His Ser Leu Asn Thr Asp Lys 260 265 Phe Ala Ala Val Phe Tyr Val Val Ile Pro Met Leu Asn Pro Leu 280 285 Ile Tyr Ser Leu Arg Asn Thr Glu Val Lys Asn Ala Leu Lys Lys Ser 295 Ile Asp Asn Ile Pro Ile Asn Ile Ser Lys 305 310

<210> 1860 <211> 314

<212> PRT

<213> Mus musculus

<400> 1860

Met Met Asp Asn Leu Ser Ser Ala Thr Glu Phe Cys Leu Leu Gly Phe 10 Pro Gly Ser Gln Glu Leu His Tyr Ile Leu Phe Ala Ile Phe Phe Phe 25 Phe Tyr Ser Val Thr Leu Leu Gly Asn Met Val Ile Ile Ile Val 40 45 Cys Val Asp Lys Arg Leu Gln Ser Pro Met Tyr Phe Phe Leu Gly Asn 55 Leu Ser Leu Leu Glu Ile Leu Val Thr Thr Thr Ile Val Pro Leu Met 70 75 Leu Trp Gly Leu Leu Pro Gly Lys Gln Thr Ile Ser Leu Asn Gly Cys Ile Ala Gln Leu Phe Leu Tyr Leu Ala Leu Gly Thr Thr Glu Phe 105 Ala Val Leu Gly Ala Met Ala Val Asp Arg Tyr Val Ala Val Cys Asn 120 Pro Leu Arg Tyr Ser Val Ile Met Asn Ser Arg Thr Cys Ile Trp Val 135 140 Val Met Val Ser Trp Met Phe Gly Phe Leu Ser Glu Ile Trp Pro Val

```
145
                   150
                                       155
Tyr Ala Thr Phe Gln Phe Thr Phe Cys Lys Ser Asn Leu Leu Asp His
               165
                                   170
Phe Tyr Cys Asp Arg Gly Gln Leu Leu Lys Leu Ser Cys Asn Glu Thr
                                185
Phe Leu Thr Glu Phe Ile Leu Phe Ile Met Ala Ile Phe Ile Ile Val
                            200
Gly Ser Leu Ile Pro Thr Ile Val Ser Tyr Thr Tyr Ile Ile Ser Thr
                       215
                                           220
Ile Leu Lys Ile Pro Ser Ala Ser Gly Arg Lys Lys Ala Phe Ser Thr
                   230
                                        235
Cys Ala Ser His Phe Thr Phe Val Val Ile Gly Tyr Gly Thr Cys Leu
               245
                                    250
Phe Leu Tyr Val Lys Pro Lys Gln Thr Gln Ala Ala Glu Tyr Asn Arg
           260
                               265
Val Ala Ser Leu Leu Val Ser Val Val Thr Pro Phe Leu Asn Pro Phe
                           280
Ile Phe Thr Leu Arg Asn Asp Lys Val Lys Glu Ala Leu Arg Asp Gly
                        295
Val Lys Arg Cys Cys Leu Leu Leu Arg Asp
                    310
```

<211> 317

<212> PRT

<213> Mus musculus

<400> 1861

Met Ser Leu Met Glu Asn Asn Thr Lys Val Thr Glu Phe Leu Leu Leu 5 10 Gly Leu Thr Asn Asp Pro Glu Leu Gln Leu Pro Leu Phe Leu Ile Phe 25 Leu Leu Ile Tyr Thr Ile Thr Leu Val Gly Asn Leu Gly Leu Ile Leu 40 Leu Ile Val Leu Asp Ser Cys Leu His Thr Pro Met Tyr Ile Phe Leu 5.5 Gly Asn Leu Ser Leu Val Asp Phe Cys Tyr Ser Ser Ala Val Thr Pro 70 75 Ser Val Met Thr Glu Leu Leu Ile Gly Lys Lys Val Ile Ser Tyr Asn 90 8.5 Asp Cys Ala Ala Gln Thr Phe Phe Phe Val Ala Phe Cys Thr Val Glu 100 105 110 Asn Tyr Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys 120 125 Lys Pro Leu His Tyr Ala Ser Thr Met Thr Thr Arg Val Cys Ile Tyr 135 Leu Ser Ile Gly Ser Tyr Val Cys Gly Phe Leu Asn Ala Ser Ile Asn 150 Thr Gly Asn Thr Phe Ser Leu Phe Phe Cys Arg Tyr Asn Met Ile His 165 170 His Phe Phe Cys Asp Ile Pro Ala Val Met Val Leu Ser Cys Ser Asp 185 Arg Tyr Phe Ser Glu Leu Leu Val Tyr Val Val Ser Phe Ser Ile 200 205 Phe Phe Ala Leu Leu Val Ile Cys Ile Ser Tyr Ile Phe Ile Phe Ile 215 220

```
Thr Ile Ala Lys Met His Ser Ser Ala Gly Tyr Gly Lys Ala Ala Pro
                   230
                                        235
Thr Cys Ala Ser His Phe Thr Ala Val Ser Ile Phe Tyr Gly Thr Val
               245
                                   250
Ile Phe Met Tyr Leu Leu Pro Ser Ser Ser His Ser Met Asp Thr Asp
                                265
           260
                                                    270
Gln Ile Ala Ser Val Phe Tyr Thr Met Ile Ile Pro Met Leu Asn Pro
                            280
Leu Val Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Phe Thr Lys
                       295.
Ile Phe Gln Val Ala Lys Gln Ser Val Met Leu Tyr Phe
                    310
```

<210> 1862 <211> 318 <212> PRT <213> Mus musculus

<400> 1862

Met Met His Arg Asn Gln Thr Val Val Thr Glu Phe Phe Thr Gly 1.0 Leu Thr Ser Ser Phe His Leu Gln Ile Val Leu Phe Leu Thr Phe Leu 25 Cys Val Tyr Leu Ala Thr Leu Leu Gly Asn Leu Gly Met Ile Ile Leu 40 45 Ile His Leu Asp Thr Arg Leu His Ile Pro Met Tyr Phe Phe Leu Ser 55 His Leu Ser Phe Val Asp Ala Cys Ser Ser Ser Val Ile Ser Pro Lys 75 70 Met Leu Ser Asp Met Phe Val Asp Lys Lys Val Ile Ser Phe Leu Gly 85 90 Cys Ala Ile Gln Leu Cys Leu Phe Ser Gln Phe Val Val Thr Glu Cys 105 Phe Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys 120 Pro Leu Leu Tyr Thr Leu Ile Met Ser Gln Arg Val Cys Val Gln Leu 135 1.40 Val Ile Gly Pro Tyr Ser Ile Gly Phe Ile Ser Thr Met Val His Ile 150 155 Ile Ser Ala Phe Val Leu Pro Tyr Cys Gly Pro Asn Leu Ile Asn His 165 170 Phe Phe Cys Asp Leu Leu Pro Val Leu Ser Leu Ala Cys Ala Asn Thr 180 185 190 Gln Met Asn Lys Arg Leu Leu Phe Ile Val Ala Gly Ile Leu Gly Val 200 Phe Ser Gly Ile Ile Ile Leu Val Ser Tyr Val Tyr Ile Ala Ile Thr 215 220 Ile Leu Lys Ile Ser Ser Ala Asp Gly Arg Arg Lys Ala Phe Ser Thr 230 235 Cys Ser Ser His Leu Thr Ala Val Ser Ile Leu Tyr Gly Thr Leu Phe 245 250 Phe Ile Tyr Val Arg Pro Ser Ser Ser Phe Ser Leu Asp Ile Asn Lys 265 Val Val Ser Leu Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Phe 280 285 Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Leu Ile Arg Thr

290 295 Phe Glu Lys Gln Phe Cys Tyr Ser Leu Gln Asp Lys Ile Leu 310 315 <210> 1863 <211> 318 <212> PRT <213> Mus musculus <400> 1863 Met Met His Arg Asn Gln Thr Val Val Thr Glu Phe Phe Thr Gly 5 10 Leu Thr Ser Ser Phe His Leu Gln Ile Val Leu Phe Leu Thr Phe Leu 25 Cys Val Tyr Leu Ala Thr Leu Leu Gly Asn Leu Gly Met Ile Ile Leu 40 Ile His Gln Asp Thr Arg Leu His Ile Pro Met Tyr Phe Phe Leu Ser His Leu Ser Phe Val Asp Ala Cys Ser Ser Ser Val Ile Ser Pro Lys 75 70 Met Leu Ser Asp Ile Phe Val Asp Lys Lys Val Ile Ser Phe Leu Gly 90 Cys Ala Ile Gln Phe Cys Leu Phe Ser Gln Phe Val Val Thr Glu Cys 100 105 Phe Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys 120 Pro Leu Leu Tyr Thr Leu Ile Met Ser Gln Arg Val Cys Val Gln Leu 135 140 Val Ile Gly Pro Tyr Ser Ile Gly Leu Ile Ser Thr Val Val His Thr 150 155 Thr Ser Ala Phe Ile Leu Pro Tyr Cys Gly Pro Asn Leu Ile Asn His 165 170 Phe Phe Cys Asp Leu Leu Pro Val Leu Ser Leu Ala Cys Ala Asp Thr 185 Gln Met Asn Lys His Leu Leu Phe Ile Met Ala Gly Ile Leu Gly Val 200 205 Phe Ser Gly Ile Ile Ile Leu Val Ser Tyr Val Tyr Ile Thr Ile Thr 215 220 Ile Leu Lys Ile Asn Ser Ala Asp Gly Arg Arg Lys Ala Phe Ser Thr 225 230 235 Cys Ser Ser His Leu Thr Ala Val Ser Ile Leu Tyr Gly Thr Leu Phe 245 250 Phe Ile Tyr Val Arg Pro Ser Ser Ser Phe Ser Leu Asp Ile Asn Lys 265 Val Val Ser Leu Phe Tyr Thr Ala Val Ile Pro Met Leu Asn Pro Phe 280 285 Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Asp Ala Leu Ile Arg Thr 295 Phe Glu Lys Lys Phe Cys Tyr Ser Leu Gln Asp Lys Ile Leu 310

<210> 1864

<211> 314

<212> PRT

<213> Mus musculus

```
<400> 1864
Met Ala Asp Glu Asn Tyr Thr Arg Ile Thr Glu Phe Ile Phe Ile Gly
                                    10
Leu Arg Tyr His Pro Asn Leu Gln Val Phe Leu Phe Leu Phe Leu
Leu Phe Tyr Leu Val Thr Met Thr Gly Asn Leu Gly Met Ile Ile Leu
                            40
Ile Arg Val Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
His Leu Ser Phe Val Asp Ile Cys Phe Ser Ser Val Val Ala Pro Lys
                   70
                                        75
Met Leu Thr Asp Phe Phe Ala Asp Lys Lys Ala Ile Ser Phe Leu Gly
               85
                                    90
Cys Val Leu Gln Gln Trp Phe Phe Gly Phe Phe Val Ala Ile Glu Cys
                               105
Leu Leu Ala Ser Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                            120
Pro Leu Leu Tyr Ser Val Ala Met Ser Gln Arg Leu Cys Ile Gln Leu
Val Ile Gly Pro Tyr Ala Val Gly Phe Phe Asn Thr Met Thr His Thr
                   150
                                        155
Thr Ala Ala Phe Arg Leu Pro Phe Cys Gly Ser Asn Ile Ile Asn His
                                   170
Phe Phe Cys Asp Met Ser Pro Ile Leu Ser Leu Ile Cys Ala Asp Ile
                               185
           180
Arg Ile Asn Lys Leu Leu Val Phe Ile Val Ala Gly Ala Val Leu Ile
                           200
Val Ser Ser Thr Thr Ile Ile Val Ser Tyr Phe His Ile Leu Ile Ala
                       215
                                           220
Ile Leu Arg Ile Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Ser Thr
                                       235
Cys Ser Ser His Val Thr Ala Val Ser Ile Leu Tyr Gly Thr Leu Phe
                245
                                    250
Phe Ile Tyr Val Arg Pro Ser Ala Ile Ser Ser Leu Asp Leu Asn Lys
                                265
Val Val Ser Val Phe Tyr Thr Ala Val Ile Pro Met Leu Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Ser Ala Met Gly Arg Thr
                       295
Val Ala Lys Ala Lys Val Phe Leu Lys Asn
                    310
<210> 1865
```

```
<210> 1865
<211> 312
<212> PRT
<213> Mus musculus
```

<400> 1865

 Met
 Asp
 Val
 Asp
 Asn
 Arg
 Thr
 Ile
 Leu
 Thr
 Glu
 Phe
 Ile
 Leu
 Leu
 Ile
 Phe
 Ile
 Leu
 Ile
 Phe
 Ile
 Ile
 Phe
 Leu
 Ile
 Phe
 Ile
 I

```
50
                       55
Gly Leu Ser Phe Leu Asp Phe Trp Tyr Asn Ser Val Tyr Ile Pro Lys
                   70
                                        75
Ile Leu Val Asn Cys Val Ser Glu Asp Lys Arg Ile Ser Leu Ala Gly
                                    90
Cys Gly Ala Gln Phe Phe Phe Ser Cys Val Ala Ala Tyr Thr Glu Cys
                                105
Tyr Leu Leu Ala Ala Met Ala Tyr Asp Arg His Ala Ala Ile Cys Ser
                           120
Pro Leu Leu Tyr Ser Ser Ile Met Ser Thr Ser Leu Cys Ala Gly Leu
                       135
                                            140
Val Gly Ala Ser Tyr Val Gly Gly Phe Leu Asn Ala Ile Ala His Thr
                   150
                                        155
Ala Asn Thr Phe Arg Leu Arg Phe Cys Gly Lys Asn Ile Ile Asp His
                                   170
               165
Phe Phe Cys Asp Val Leu Pro Leu Val Lys Met Ser Cys Thr Asp Thr
                               185
Arg Val Tyr Val Lys Ile Leu Ser Ser Met Val Gly Phe Thr Val Leu
       195
                            200
Ser Ser Ile Leu Ala Ile Leu Ile Ser Tyr Leu Asn Ile Leu Leu Ala
                        215
Ile Leu Arg Ile Arg Ser Ala Ser Gly Arg Arg Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ala Ser His Leu Val Ser Val Thr Leu Phe Tyr Gly Ser Leu Leu
                                    250
               245
Phe Met Tyr Ser Arg Pro Ser Ser Asn Tyr Ser Leu Glu Arg Asp Lys
            260
                                265
Val Ala Ala Met Phe Tyr Ile Ile Ile Asn Pro Leu Leu Asn Pro Phe
                            280
                                                285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Phe Lys Lys Leu
                       295
Met Gln Thr Ile Lys Gln Gln Thr
                    310
```

<211> 320

<212> PRT

<213> Mus musculus

<400> 1866

Met Thr Arg Phe Ser Ser Val Asp Met Glu Leu Asp Asn Arg Thr Ile Leu Thr Glu Phe Ile Leu Val Gly Phe Ser Ala Asp Pro His Trp Gln 25 Leu Thr Leu Phe Gly Ile Phe Leu Thr Ile Tyr Leu Leu Thr Leu Ser Gly Asn Met Leu Leu Val Val Leu Ile Arg Ile Asn Ser Arg Leu His 55 Thr Pro Met Tyr Phe Phe Ile Ser Asn Leu Ser Phe Leu Asp Phe Trp 75 70 Tyr Thr Ser Val Tyr Thr Pro Lys Ile Leu Ala Thr Cys Ile Ser Glu 85 90 Asp Lys Arg Ile Ser Leu Ala Gly Cys Gly Ala Gln Leu Phe Phe Ser 100 105 110 Cys Val Val Ala Tyr Thr Glu Cys Tyr Leu Leu Ala Ala Met Ala Tyr 120

```
Asp Arg His Ser Ala Ile Cys Ser Pro Leu Ile Tyr Ser Ser Ile Met
                       135
Ser Ser Leu Cys Thr Gly Leu Val Ala Gly Cys Tyr Ile Gly Gly
                   150
                                       155
Val Leu Asn Ala Ile Ala His Thr Ala Asn Thr Phe Arg Leu Thr Phe
                165
                                    170
Cys Gly Lys Asn Ile Ile Asp His Phe Phe Cys Asp Ala Pro Pro Leu
                               185
Val Lys Met Ser Cys Thr Asp Thr Arg Val Tyr Glu Lys Val Leu Leu
                           200
Gly Val Val Gly Phe Thr Val Leu Ser Ser Ile Leu Ala Ile Leu Ile
                       215
                                            220
Ser Tyr Phe Asn Ile Leu Leu Ala Ile Leu Arg Ile Arg Ser Ala Ser
                   230
                                       235
Gly Arg Arg Lys Ala Phe Ser Thr Cys Ala Ser His Leu Val Ser Val
               245
                                   250
Met Leu Phe Tyr Gly Ser Leu Leu Phe Met Tyr Ser Arg Pro Ser Ser
            260
                                265
Thr Tyr Ser Leu Glu Lys Asp Lys Val Ala Ala Leu Phe Tyr Thr Val
                            280
Val Asn Pro Leu Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp
                       295
                                           300
Val Lys Asp Ala Phe Arg Lys Ala Thr Gln Thr Ile Arg Pro His Thr
                    310
                                        315
```

<211> 305

<212> PRT

<213> Mus musculus

<400> 1867

Met Glu Gln Tyr Asn Asp Thr Val Thr Glu Phe Ile Leu Val Gly Phe Thr Thr Asn Pro Val Met Gln Leu Val Leu Phe Val Ile Phe Leu Ala 25 Val Tyr Ala Leu Thr Val Leu Gly Asn Ser Thr Leu Ile Val Leu Ile Cys Asn Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Ile Gly Asn 55 Leu Ser Phe Leu Asp Leu Gly Leu Ser Thr Val Tyr Thr Pro Lys Ile 75 Leu Val Thr Cys Ile Ser Glu Asp Lys Ser Ile Ser Phe Ser Gly Cys 8.5 90 Val Ala Gln Phe Phe Ser Ala Gly Leu Gly Tyr Thr Glu Cys Tyr 105 Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser Lys Pro 120 Leu Leu Tyr Ser Gln Ala Met Ser Leu Lys Leu Cys Ala Phe Leu Val 135 140 Gly Val Ser Tyr Leu Gly Gly Leu Ile Asn Ser Phe Ile Ile Thr Lys 150 155 Asp Thr Phe Ala Leu Thr Phe Cys Asn Asp Asn Val Ile Asp Asp Phe 165 170 Phe Cys Asp Ile Pro Pro Leu Val Lys Leu Ala Cys Gly Lys Lys 185 Ser Phe Gln Ser Val Leu Phe Phe Leu Leu Thr Ser Asn Val Ile Ile

```
195
                            200
                                                205
Pro Ile Val Phe Ile Leu Ala Thr Tyr Leu Phe Ile Ile Ala Thr Ile
                       215
                                            220
Leu Arg Ile Arg Ser Thr Gln Gly Arg Leu Lys Ala Phe Ser Thr Cys
Ser Ser His Leu Ile Ser Val Thr Leu Tyr Tyr Gly Ser Ile Leu Tyr
                                   250
               245
Ile Tyr Ala Trp Pro Arg Ser Ser Tyr Ser Leu Asp Arg Asp Lys Ile
                               265
Val Ser Thr Phe Tyr Thr Val Val Phe Pro Met Leu Asn Pro Leu Ile
                           280
                                               285
Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Ser Lys Leu Phe
                        295
Lys
305
<210> 1868
<211> 311
<212> PRT
<213> Mus musculus
<400> 1868
Met Glu Arg Gly Asn His Thr Val Thr Gly Phe Ile Leu Leu Gly Phe
                                    10
Ser Thr Asp Pro Val Met Gln Lys Ile Leu Phe Val Met Phe Leu Gly
                                25
Val Tyr Ser Leu Thr Leu Leu Gly Asn Thr Thr Leu Ile Ile Leu Ile
                            40
Cys Asn Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Ile Gly Asn
                        55
Leu Ser Phe Leu Asp Leu Trp Tyr Ser Ser Val Tyr Thr Pro Lys Ile
                    70
                                        75
Leu Val Thr Cys Ile Ser Glu Asp Lys Ser Ile Ser Phe Ala Gly Cys
                85
Leu Ser Gln Phe Phe Phe Ser Ala Gly Leu Ala Tyr Ser Glu Cys Tyr
                               105
Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Thr Ala Ile Ser Asn Pro
                           120
Leu Leu Tyr Ala Gln Ala Met Ser Arg Arg Leu Cys Val Cys Leu Val
                       135
Val Tyr Ser Tyr Thr Gly Gly Phe Val Asn Ala Ile Ile Leu Thr Ser
                   150
                                       155
Asn Thr Phe Thr Leu Asp Phe Cys Gly Asp Asn Val Ile Asp Asp Phe
                                    170
Phe Cys Asp Val Pro Pro Leu Val Lys Leu Ala Cys Asp Val Arg Glu
                                185
Ser Tyr Gln Ser Val Leu Tyr Phe Leu Leu Ala Ser Asn Val Ile Ser
                            200
Pro Thr Leu Leu Ile Leu Thr Ser Tyr Leu Phe Ile Ile Ala Ala Ile
                       215
Leu Arg Ile Arg Ser Thr Gln Gly Arg Leu Lys Ala Phe Ser Thr Cys
                   230
                                        235
Ser Ser His Leu Ile Ser Val Thr Leu Tyr Tyr Gly Ser Ile Leu Tyr
               245
                                   250
Ile Tyr Ser Arg Pro Ser Ser Ser Tyr Ser Leu Glu Arg Asp Lys Met
```

265

260

Val Ser Thr Phe Tyr Thr Val Leu Phe Pro Met Leu Asn Pro Met Ile
275

Tyr Ser Leu Arg Asn Lys Asp Val Lys Glu Ala Leu Arg Lys Leu Phe
290

Lys Leu Ala Pro Ser Glu Val
305

<210> 1869 <211> 313 <212> PRT <213> Mus musculus

<400> 1869

Met Glu Ile Ser Asn Gln Ser Gly Ile Ser Glu Phe Phe Leu Thr Gly 10 Leu Thr Tyr Ser Pro Ala Ile Glu Ser Phe Ile Phe Ser Leu Phe Leu 25 Ser Ile Tyr Phe Val Thr Ile Phe Gly Asn Ile Leu Ile Ile Leu Ala Val Arg Leu Asp Tyr His Leu His Thr Pro Met Tyr Phe Phe Ile Ala 55 60 Asn Leu Ser Phe Thr Asp Ile Cys Ile Ser Thr Thr Ile Ile Pro Lys Met Leu Leu Asn Ile Glu Thr Gln Asn Gln Ser Ile Thr Tyr Thr Gly 85 90 Cys Leu Ser Gln Val Cys Phe Val Leu Ile Phe Gly Gly Leu Glu Ser 105 Cys Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Leu Ala Ile Val His 115 120 125 Pro Leu Arg Tyr Thr Val Ile Met Asn Pro Cys Leu Cys Val Leu Leu 135 . Val Leu Ser Leu Phe Ile Ser Thr Ile Asn Ala Leu Leu His Ser 150 155 Leu Met Leu Leu Lys Leu Ser Phe Cys Lys Asp Gln Asn Ile Leu His 170 165 Phe Phe Cys Glu Leu Val Gln Val Ile Lys His Ala Cys Ser Asp Thr 185 Phe Ile Asn Thr Leu Leu Ile Tyr Thr Val Thr Ser Val Phe Ala Gly 200 205 Val Pro Leu Ala Gly Ile Ile Phe Ser Tyr Ile Gln Ile Val Ser Ser 215 Ile Leu Lys Ile Ser Ser Val Gln Gly Arg Asn Lys Ala Phe Ser Thr 235 230 Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ala Phe 250 Gly Val Tyr Met Ser Ser Ala Val Ser Asp Ser Ser Val Lys Asn Ile 265 270 Val Phe Ser Met Met Tyr Thr Val Val Pro Gln Met Leu Asn Pro Phe 280 285 Ile Tyr Ser Leu Arg Asn Arg Glu Met Lys Gln Ala Met Arg His Leu 295 Leu Phe Pro Val Val Leu Ser Ser Pro 305 310

```
<212> PRT
<213> Mus musculus
<400> 1870
Met Ser Asn Met Glu Val Glu Asn Lys Ser Val Val Leu Asp Ile Phe
Leu His Gly Leu Thr Asn Asp Pro Glu Leu Gln Pro Phe Ile Phe Val
                               25
Leu Phe Leu Ser Ile Tyr Leu Ile Thr Val Ser Gly Asn Leu Leu Ile
                           40
Met Leu Ala Ile Lys Cys Asp Phe His Leu His Asn Pro Met Tyr Phe
                       55
Phe Leu Cys His Leu Ser Phe Asn Asp Met Tyr Leu Ile Ser Ile Thr
                   70
                                       75
Val Pro Lys Met Leu Met Asn Ile Gln Thr Lys Asp Gln Arg Ile Thr
               85
                                   90
Phe Ala Gly Cys Leu Ser Gln Ala Cys Phe Val Val Val Cys Thr Ile
                               105
Phe Glu Cys Phe Leu Leu Gly Val Met Ala Tyr Asp Arg Tyr Ile Ala
                           120
Ile Cys Tyr Pro Leu Arg Tyr Thr Val Leu Met Asn Pro Ser Phe Cys
                       135
Val Ile Leu Val Leu Phe Ser Leu Phe Phe Ser Ile Val Asn Gly Leu
                  150
                                       155
Leu His Ser Leu Met Val Leu Tyr Leu Ser Phe Cys Thr Asp Leu Glu
               165
                                   170
Ile Leu His Phe Phe Cys Glu Ile Ala Gln Ile Leu Lys Leu Ala Cys
                               185
Ser Asp Ser Leu Ile Asn Asn Ile Leu Ile Phe Val Thr Ala Ser Ile
       195
                           200
                                               205
Phe Ala Gly Leu Pro Leu Phe Ala Ile Ile Phe Ser Tyr Thr His Ile
                       215
Val Ser Thr Val Leu Lys Met Pro Ser Ser Glu Gly Lys Tyr Lys Ala
                   230
                                       235
Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly
               245
                                   250
Thr Gly Phe Gly Val Tyr Ile Thr Ser Lys Val Ile Asp Ser Pro Lys
                               265
Lys Ile Ala Val Ala Ser Val Met Tyr Ser Val Val Pro Pro Met Leu
                           280
                                              285
Asn Pro Phe Val Tyr Cys Leu Arg Asn Arg Asp Met Lys Glu Ala Leu
                       295
Lys Lys Val Ile Gly Arg Thr Ala Ser Leu Leu
                   310
<210> 1871
<211> 312
<212> PRT
<213> Mus musculus
<400> 1871
Met Glu Val Lys Asn Lys Ser Val Val Leu Asp Ile Phe Leu His Gly
                                   10
Leu Thr Asp Asp Ile Glu Leu Gln Pro Phe Ile Phe Gly Phe Phe Leu
```

<211> 315

```
Cys Met Tyr Leu Ile Thr Ile Phe Gly Asn Leu Leu Ile Met Leu Ala
                            40
Ile Ile Cys Asp Ser His Leu His Lys Pro Met Tyr Phe Phe Leu Cys
His Leu Ala Phe Asn Asp Met Tyr Leu Ile Ser Ile Thr Val Pro Lys
Leu Leu Val Asn Val Gln Thr Gln Asp Gln Arg Ile Thr Leu Ala Gly
                                    90
Cys Leu Ser Gln Gly Cys Phe Val Ala Val Cys Phe Ile Phe Glu Cys
                               105
Phe Leu Leu Gly Ile Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys Phe
                           120
Pro Leu Arg Tyr Thr Val Leu Ile Asn Pro Phe Phe Cys Val Ile Val
                       135
                                           140
Val Leu Ile Ser Leu Phe Ile Ser Ile Val Asn Gly Leu Leu His Ser
                   150
                                       155
Leu Met Val Leu His Leu Ser Phe Cys Thr Asp Leu Glu Ile Leu His
               165
                                   170
Phe Phe Cys Glu Ile Ala Gln Ile Leu Lys Leu Ala Cys Ser Asp Asn
           180
                                185
Leu Ile Asn Asn Ile Leu Ile Phe Val Thr Ala Ser Ser Phe Ala Gly
       195
                            200
Val Pro Leu Cys Gly Ile Ile Phe Ser Tyr Val His Ile Val Ser Thr
                       215
                                            220
Val Leu Lys Met Pro Ser Ser Glu Gly Lys Tyr Lys Ala Phe Ser Thr
                   230
                                        235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Gly Phe
               245
                                    250
Gly Val Tyr Ile Thr Ser Val Val Ile Asp Ser Pro Lys Glu Ile Ala
           260
                               265
                                                   270
Ile Ala Ser Val Met Tyr Ser Ile Val Pro Pro Met Leu Asn Pro Phe
                           280
Val Tyr Ser Leu Lys Asn Arg Asp Met Lys Glu Ala Leu Lys Lys Val
                       295
Ile Gly Arg Thr Val Ser Leu Pro
```

<211> 317

<212> PRT

<213> Mus musculus

<400> 1872

 Met
 Cys
 Lys
 Met
 Glu
 Val
 Glu
 Asn
 Lys
 Ser
 Val
 Val
 Phe
 Asp
 Ile
 Phe

 Leu
 His
 Gly
 Leu
 Thr
 Asp
 Asp
 Thr
 Glu
 Leu
 Gln
 Phe
 Phe
 Ile
 Phe
 Gly
 Asn
 Leu
 Ile
 Phe
 Gly
 Asn
 Leu
 Leu
 Ile
 Ile
 Ile
 Phe
 Gly
 Asn
 Leu
 Leu
 Ile
 Ile

```
100
                               105
Phe Glu Cys Phe Leu Leu Gly Ile Met Ala Tyr Asp Arg Phe Ile Ala
       115
                           120
                                               125
Ile Cys Tyr Pro Leu Arg Tyr Thr Val Leu Met Asn Pro Cys Phe Cys
                       135
Val Ile Leu Thr Leu Ile Ser Leu Phe Phe Ser Ile Val Asn Gly Leu
                                        155
Leu His Ser Leu Met Val Leu His Leu Ser Phe Cys Thr Asp Leu Glu
               165
                                    170
Ile Leu His Phe Phe Cys Glu Ile Ala Gln Ile Leu Lys Leu Ala Cys
                                185
Ser Asp Ser Leu Ile Asn Asn Ile Leu Ile Phe Val Thr Ser Ser Ile
       195
                           200
                                                205
Phe Ala Gly Val Pro Leu Cys Gly Ile Ile Phe Ser Tyr Val His Ile
                       215
                                            220
Val Ser Thr Val Leu Lys Met Pro Ser Leu Glu Gly Lys Tyr Lys Ala
                   230
                                       235
Phe Ser Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly
                                    250
                245
Thr Gly Phe Gly Val Tyr Ile Ser Ser Asn Val Ile Asp Ser Pro Lys
                                265
Lys Ile Ala Met Ala Ser Val Met Tyr Ser Ile Val Pro Pro Met Met
        275
                            280
Asn Pro Phe Ile Tyr Ser Met Arg Asn Arg Asn Met Lys Glu Ala Leu
                       295
Lys Lys Val Ile Gly Arg Lys Leu Leu Phe Ser Asp Val
                    310
```

<211> 295

<212> PRT

<213> Mus musculus

<400> 1873

Met Gly Leu Ser Asp Asp Leu Gln Leu Gln Pro Ile Leu Phe Gly Leu 10 Phe Leu Ser Met Tyr Leu Val Thr Leu Leu Gly Asn Leu Leu Ile Ile 25 Leu Thr Val Ser Ser Asp Ser His Leu His Ser Pro Met Tyr Phe Phe 40 Leu Ser Asn Leu Ser Leu Ala Asp Val Ser Phe Thr Ser Thr Thr Leu 55 Pro Lys Met Ile Val Asp Ile Gln Thr His Asn Arg Ala Ile Ser Tyr 70 75 Ser Gly Cys Leu Thr Gln Met Ser Phe Phe Met Leu Phe Gly Cys Leu 90 Asp Ser Leu Leu Thr Ala Met Ala Tyr Asp Arg Phe Val Ala Ile 105 Cys His Pro Leu His Tyr Gln Phe Ile Met Asn Pro Arg Leu Cys Gly 120 125 Leu Leu Val Phe Leu Ser Val Leu Ile Ser Leu Phe Val Ser Gln Leu 135 140 His Asn Ser Val Val Leu Gln Leu Thr Tyr Phe Lys Ser Val Asp Ile 150 155 Ser His Phe Phe Cys Asp Pro Ser Gln Leu Leu Asn Leu Ala Cys Ser 170

```
Asp Thr Phe Thr Asn Asn Ile Val Met Tyr Phe Val Gly Ala Ile Ser
           180
                               185
Gly Phe Leu Pro Ile Ser Gly Ile Phe Phe Ser Tyr Tyr Lys Ile Val
                           200
Ser Ser Ile Leu Arg Met Pro Ser Pro Gly Gly Lys Tyr Lys Ala Phe
                       215
Ser Thr Cys Gly Ser His Leu Ser Val Val Cys Leu Phe Tyr Gly Thr
                   230
                                       235
Gly Leu Gly Val Tyr Leu Ser Ser Ala Val Ser Leu Ser Pro Arg Lys
               245
                                  250
Gly Ala Val Ala Ser Ile Val Tyr Thr Val Val Thr Pro Met Leu Asn
           260
                               265
Pro Phe Ile Tyr Ser Leu Arg Asn Gln Asp Ile Lys Arg Ala Met Trp
               280
Arg Leu Leu Arg Lys Thr Val
   290
```

<210> 1874 <211> 306 <212> PRT

<213> Mus musculus

<400> 1874

Met Glu Pro Tyr Asn Leu Thr Gly Ala Leu Glu Phe Leu Leu Gly 10 Leu Ser Glu Asp Pro Glu Leu Gln Pro Val Leu Phe Ala Leu Phe Leu 25 Leu Ile Tyr Leu Leu Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala 4.0 45 Ile Ser Ser Asp Ser His Leu His Ser Pro Met Tyr Phe Phe Leu Tyr 55 Asn Leu Ser Leu Ser Asp Met Gly Phe Ser Ser Thr Thr Ile Pro Lys 70 75 80 Met Leu Ile Asn Met Gln Thr His Asn Lys Ser Ile Thr Tyr Ala Ala 90 Cys Leu Thr Gln Val Ser Phe Phe Thr Leu Phe Gly Cys Met Asp Ser 105 Leu Leu Thr Val Met Ala Tyr Asp Arg Trp Val Ala Ile Cys Arg 120 Pro Leu Tyr Tyr Gln Val Ile Leu Asn Pro Gly Leu Cys Arg Arg Leu 135 140 Val Leu Met Leu Phe Phe Ile Ser Tyr Met Asn Ser Leu Val His Tyr 155 150 Phe Ile Val Ser Gln Leu Lys Phe Cys Thr Asn Met Glu Ile Pro His 165 170 Phe Phe Cys Asp Ile Pro Glu Leu Leu Lys Leu Ala Cys Ser Asp Thr 185 Ser Ile Asn Asn Leu Phe Arg Phe Leu Leu Ser Ile Ile Phe Gly Phe 200 Leu Pro Val Ser Gly Ile Phe Tyr Ser Tyr Tyr Lys Ile Ile Ser Ser 215 220 Ile Ile Arg Val Pro Ser Leu Leu Gly Lys Tyr Lys Ala Phe Ser Thr 230 235 Cys Gly Ser His Leu Ser Val Val Cys Leu Phe Tyr Gly Thr Gly Leu 245 250 Glu Ala Tyr Leu Ser Ser Thr Ile Ser Arg Ser Thr Arg Glu Asn Met

260 265 Leu Ala Ser Val Ile Tyr Thr Met Arg Val Pro Met Ile Asn Pro Phe 280 Ile Tyr Ser Leu Arg Asn Arg Ala Met Lys Lys Ala Leu Gln Lys Ile 295 300 Phe Ser 305 <210> 1875 <211> 319 <212> PRT <213> Mus musculus <400> 1875 Met Phe Ile Phe Lys Ser Cys Ser Asn Asn Ile Glu Leu Gln Asn Leu Thr Leu Val Ser Glu Phe His Leu Met Arg Ile Ser Asp Asp Pro Glu Leu Gln Pro Ile Leu Phe Gly Leu Phe Leu Ser Met Tyr Leu Val Thr Val Leu Gly Asn Leu Ile Ile Ile Leu Ala Val Asn Ser Asp Ser Asn 55 Leu His Thr Pro Met Tyr Phe Phe Leu Cys Asn Leu Ser Leu Ala Asp 70 75 Ile Cys Phe Ile Ser Thr Thr Val Pro Lys Met Ile Val Asn Ile Gln 85 90 Thr His Ser Lys Glu Ile Ile Tyr Val Gly Cys Leu Thr Gln Met Ser 100 105 110 Phe Leu Ile Leu Phe Gly Cys Met Asp Gly Leu Leu Thr Val Met 120 Ala Tyr Asp Arg Phe Val Ala Val Cys His Pro Leu His Tyr Ser Leu 135 140 Ile Met Asn Pro Arg Leu Cys Gly Ser Leu Val Cys Leu Ser Leu Leu 150 155 Ile Ser Leu Val Asp Ser Gln Ala His Asn Leu Ile Ala Leu Gln Ile 165 170 Ile Tyr Phe Lys Asp Val Lys Ile Ser Asn Phe Phe Cys Asp Pro Ala 185 Gln Leu Leu Asn Leu Ala Cys Phe Asn Thr Phe Ile Asn Asn Ile Val 200 205 Met Tyr Phe Val Gly Ala Ile Ser Gly Leu Leu Pro Ile Ser Gly Ile 215 220 Phe Phe Ser Tyr Tyr Lys Ile Val Phe Ser Ile Leu Lys Ile Pro Ser 230 235 Lys Gly Gly Arg Tyr Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ser 245 250 Val Val Cys Leu Phe Tyr Gly Thr Ala Ile Gly Val Tyr Leu Gly Ser 260 Ala Val Ser His Ser Pro Arg Ser Thr Ala Val Ala Ser Leu Ile Tyr 275 280 Thr Val Val Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn 295 Lys Asp Ile Lys Arg Ala Val Lys Arg Leu His Arg Arg Met Leu

310

315

```
<211> 295
<212> PRT
<213> Mus musculus
<400> 1876
Met Ser Leu Ser Glu Asn Val Glu Leu Gln Pro Phe Leu Leu Val Leu
                                    10
Phe Leu Ser Phe Tyr Met Val Thr Val Leu Gly Asn Leu Leu Ile Ile
                               25
Leu Ala Val Cys Ser Asp Phe His Leu His Thr Pro Met Tyr Phe Phe
                           40
Leu Ser Asn Leu Ser Trp Ser Asp Ile Cys Leu Ile Ser Thr Ile Val
Pro Arg Met Ile Trp Asp Ile Gly Thr Gln Ser Arg Val Ile Ser Tyr
                   70
                                       75
Val Ser Cys Leu Thr Gln Met Ser Met Phe Ile Val Phe Gly Cys Met
                                   90
Asp Ser Met Leu Leu Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile
            1.00
                               105
Cys His Pro Leu His Tyr Lys Ile Ile Met Asn Pro Asn Leu Cys Ala
                           120
Phe Leu Leu Ala Ser Val Leu Ala Ser Leu Val Asp Ser Gln Val
                       135
                                           140
His Asn Leu Ile Val Leu Gln Phe Thr Tyr Phe Asn Asp Met Glu Ile
                   150
                                       155
Ser Asn Phe Phe Cys Asp Pro Ser Gln Leu Leu Asn His Asn Cys Ser
               165
                                170
Glu Met Phe Thr Lys Asn Ile Val Ile His Phe Ile Gly Val Phe Phe
           180
                                                   190
                               185
Gly Leu Phe Ser Thr Thr Gly Ile Ile Phe Ser Tyr Tyr Lys Ile Ile
                           200
                                               205
Ser Ser Ile Leu Arg Ile Pro Thr Lys Asp Gly Lys Tyr Lys Ala Phe
                        215
                                            220
Ser Thr Cys Gly Ser His Leu Ser Val Val Cys Leu Phe Tyr Gly Thr
                                        235
Ser Ile Gly Val Tyr Ile Gly Ser Thr Ala Ser Asn Ser Pro Lys Asn
               245
                                   250
Cys Ala Ile Ala Ser Leu Met Tyr Thr Val Val Thr Pro Met Leu Asn
                               265
Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Thr Ala Leu Trp
                            280
Gln Leu Gln Arg Arg Ala Met
    290
<210> 1877
<211> 309
<212> PRT
<213> Mus musculus
<400> 1877
Met Met Lys Leu Lys Met Glu Asn Ile Thr Tyr Val Ser Gln Phe Tyr
                                   10
Leu Leu Arg Val Ser Asp Asp Pro Glu Leu Gln Pro Phe Leu Ser Gly
                               25
Leu Phe Leu Ser Met Tyr Leu Ile Ser Val Leu Gly Asn Leu Ile Ile
```

```
35
                           40
Ile Leu Ile Val Ser Ser Phe Ser His Leu His Thr Pro Met Tyr Phe
                       55
Phe Leu Ser Ile Leu Ser Leu Ala Asp Ile Gly Phe Ile Ser Thr Thr
                                        75
Val Pro Asn Met Ile Ala Glu Leu Gln Ile His Ser Pro Val Ile Ser
Tyr Val Gly Cys Leu Thr Gln Met Ser Leu Phe Ile Ile Phe Ala Cys
           100
                               105
Met Asp Ser Met Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala
                           120
       115
                                               125
Ile Cys His Pro Leu Arg Tyr Ala Ile Ile Met Asn Pro Cys Arg Cys
                       135
Gly Ile Leu Val Leu Met Ser Phe Ser Ala Ser Leu Phe Glu Ser Leu
                   150
                                       155
Leu His Asn Leu Val Ala Leu Gln Leu Lys Cys Phe Lys Asp Val Ala
                                    170
Ile Ala Asn Phe Phe Cys His Pro Ser Gln Leu Leu Asn Leu Ser Cys
            180
                                185
Asn Asn Thr Phe Asn Asn Ile Leu Met Tyr Val Ile Gly Val Ile
        195
                            200
Leu Gly Val Phe Pro Leu Ser Gly Ile Leu Ile Ser Tyr Phe Lys Ile
                       215
                                           220
Ile Ser Ser Ile Leu Arg Ile Thr Ser Ser Ser Gly Arg Tyr Lys Ala
                   230
                                        235
Phe Ser Thr Cys Gly Ser His Leu Ala Val Val Cys Leu Phe Tyr Gly
               245
                                    250
Thr Gly Leu Gly Glu Tyr Phe Gly Ser Leu Leu Ser His Ser Ser Gly
                                265
Asn Asn Val Val Ala Ser Leu Met Tyr Thr Val Val Thr Pro Met Leu
                           280
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Gln Asp Ile Ser Asp Ser Leu
                       295
                                            300
Lys Arg Leu His Phe
305
```

<210> 1878 <211> 312 <212> PRT <213> Mus musculus

<400> 1878

Met Ile Asn Asn Asp Val Glu Asn Leu Lys Asp Val Leu Glu Phe His 10 Leu Met Ala Leu Ser Glu Asp Pro Glu Leu Gln Leu Leu Leu Phe Gly 25 Leu Phe Leu Ser Val Tyr Leu Val Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ile Ile Ile Phe Asp Ser Asn Leu His Asn Pro Met Tyr Phe 55 60 Phe Leu Ser Asn Leu Ser Leu Ile Asp Ile Leu Phe Ile Ser Thr Thr 70 75 Ile Pro Lys Met Ile Val Gly Ile Lys Met His Ser Arq Val Ile Ser 85 90 Tyr Ala Gly Cys Leu Thr Gln Met Ser Leu Phe Leu Phe Phe Val Cys 105 110

```
Met Asp Asp Met Ile Leu Asn Val Met Ala Tyr Asp Arg Phe Val Ala
                           120
                                               125
Ile Cys His Pro Leu His Tyr Thr Val Leu Met Asn Pro Gln Val Cys
                       135
                                           140
Val Ile Leu Ile Leu Leu Ser Phe Ser Val Ser Val Phe Asp Ser Gln
                   150
                                       155
Leu His Asn Leu Ile Ala Leu Gln Asp Thr Cys Phe Arg Asp Val Glu
               165
                                   170
Ile Ala Asn Phe Phe Cys His Pro Ser Gln Leu Leu Asn Leu Ala Cys
                               185
Thr Asn Thr Leu Ser Ser Asn Ile Val Ile Tyr Phe Ile Gly Val Ile
                           200
                                                205
Leu Gly Ile Phe Pro Val Leu Gly Ile Ile Leu Ser Tyr Cys Lys Ile
                       215
                                           220
Val Phe Ser Ile Leu Lys Ile Pro Ser Ser Ser Gly Lys Tyr Lys Ala
                   230
                                       235
Phe Ser Thr Cys Gly Ser His Leu Leu Val Val Cys Leu Phe Tyr Gly
                                   250
               245
Thr Gly Ile Gly Val Tyr Leu Gly Ser Ala Val Ser His Ser Pro Arg
                                265
Lys Asn Ala Val Ala Ser Leu Met Tyr Thr Ala Val Ser Pro Met Leu
                           280
Asn Pro Phe Ile Tyr Thr Leu Arg Asn Arg Asp Ile Ser Asn Ala Leu
                       295
Lys Arg Phe His Ser Arg Phe Ser
                   310
```

<211> 295

<212> PRT

<213> Mus musculus

<400> 1879

Met Ser Leu Ser Glu Asn Val Glu Val Gln Pro Phe Leu Leu Val Leu 5 10 Phe Leu Ser Phe Tyr Met Val Thr Val Leu Gly Asn Leu Leu Ile Ile 25 Leu Ala Val Cys Ser Asp Phe His Leu His Thr Pro Met Tyr Phe Phe 40 Leu Ser Asn Leu Ser Trp Ser Asp Ile Cys Leu Ile Ser Thr Ile Val 55 Pro Arg Met Ile Trp Asp Ile Gly Thr Gln Ser Arg Val Ile Ser Tyr 75 70 Val Ser Cys Leu Thr Gln Met Ser Met Phe Ile Leu Phe Ala Cys Met 90 85 Asp Ser Met Leu Leu Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile 100 105 Cys His Pro Leu His Tyr Lys Ile Ile Met Asn Pro Asn Leu Cys Ala 120 Phe Leu Leu Ala Ser Val Leu Ala Ser Leu Val Asp Ser Gln Val 135 140 His Asn Leu Ile Val Leu Gln Phe Thr His Phe Ser Gly Met Glu Ile 150 155 Ser Asn Phe Tyr Cys Asp Pro Ser Gln Leu Leu Asn Leu Asn Cys Ser 165 170 175 Glu Met Phe Thr Lys Ser Ile Val Ile His Phe Ile Gly Val Phe Phe

```
180
                               185
Gly Leu Phe Ser Thr Thr Gly Ile Ile Ser Ser Tyr Tyr Lys Ile Ile
                           200
Ser Ser Ile Leu Arg Ile Pro Ser Lys Asp Gly Lys Tyr Lys Ala Phe
                       215
Ser Thr Cys Gly Ser His Leu Ser Val Val Cys Leu Phe Tyr Gly Thr
                   230
                                       235
Ala Thr Ala Val Tyr Ile Gly Ser Thr Ser Ser Tyr Ser Pro Glu Asn
                                   250
               245
Cys Ala Val Ala Ser Leu Met Tyr Thr Val Val Ile Pro Met Leu Asn
                               265
Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Ile Ala Leu Arg
    275
                           280
Lys Leu Gln Arg Arg Ala Ile
    290
```

<210> 1880 <211> 311 <212> PRT

<213> Mus musculus

<400> 1880

Met Lys Asn Arg Thr Ser Val Ser Glu Phe Ile Leu Leu Gly Leu Thr 10 Ser Asp Pro Lys Leu Asn Ile Leu Ile Phe Ile Phe Leu Phe Ile Thr 20 25 Tyr Ile Leu Ser Ile Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu 40 45 Ile Asp Ser His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe 55 Ser Phe Leu Glu Ile Ser Phe Thr Thr Val Ser Ile Pro Arg Phe Leu 70 75 Val Ser Ile Val Thr Gly Asp Met Thr Ile Ser Tyr Asn Ser Cys Met 90 Ala Gln Val Phe Phe Phe Ile Leu Leu Gly Ser Thr Glu Phe Phe Leu 100 105 Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 His Tyr Thr Thr Ile Met Asn Ser Arg Val Cys Met Gln Leu Ile Val 135 140 Ser Ser Trp Leu Ala Gly Phe Leu Ile Ile Phe Pro Pro Val Ile Met 150 155 Gly Leu Gln Leu Asp Phe Cys Asp Ser Asn Ile Ile Asp His Phe Thr 165 170 Cys Asp Ser Ser Pro Leu Leu Ile Ser Cys Thr Asp Thr Ala Phe 185 Leu Glu Leu Leu Ala Phe Phe Leu Ala Val Phe Thr Leu Met Val Thr 200 Leu Thr Leu Val Ile Leu Ser Tyr Ser Phe Ile Leu Arg Thr Ile Leu 215 220 Arg Ile Pro Ser Ala Glu Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser 230 235 Ser His Met Ile Val Val Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met 245 250 Tyr Val Lys Thr Ser Ala Lys Glu Gly Val Ala Leu Thr Lys Gly Ile Ala Val Leu Asn Thr Ser Val Ala Pro Met Leu Asn Pro Phe Ile Tyr 275 280 285

Ser Leu Arg Asn Lys Gln Val Lys Glu Ser Phe Arg Asn Leu Ile Lys 290 295 300

Lys Cys Ile Ser Asn Lys Ile 305 310

<210> 1881 <211> 319 <212> PRT <213> Mus musculus

<400> 1881

Met Lys Asn Gln Ser Val Glu Ile Val Phe Ile Leu Leu Gly Leu Thr 10 Asp Asp Pro Gln Leu Gln Ile Leu Ile Phe Leu Phe Met Phe Phe Asn 25 Tyr Ile Leu Ser Leu Ile Gly Asn Leu Ile Ile Ile Phe Leu Thr Leu Leu Asp Leu Arg Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe 55 Ser Phe Leu Glu Met Ala Phe Thr Ser Ser Cys Ile Pro Arg Phe Leu 75 Met Ser Ile Leu Thr Gly Asp Lys Thr Ile Ser Tyr Gly Ser Cys Leu 85 90 Thr Gln Leu Phe Phe Phe Leu Leu Ile Thr Glu Phe Tyr Leu 100 105 Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu 120 125 115 His Tyr Pro Ile Ile Met Asn Ser Lys Val Cys His Leu Leu Val Leu 135 Ser Ser Trp Val Thr Gly Phe Leu Ser Ile Phe Pro Pro Leu Met Leu 150 155 Gly Leu Lys Leu Asp Phe Cys Ala Ser Lys Leu Ile Asp His Phe Leu 170 165 Cys Asp Thr Ser Pro Val Leu Gln Leu Ser Cys Thr Asp Thr Arg Phe 185 Ile Glu Trp Met Ala Phe Val Ile Ala Ile Met Thr Leu Ile Ile Thr 200 195 205 Leu Ile Leu Val Ile Leu Ser Tyr Thr Leu Ile Ile Lys Thr Ile Leu 215 220 Lys Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser 235 230 Ser His Met Val Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Met 250 Tyr Ile Lys Thr Ser Ala Lys Glu Arg Val Ser Leu Asn Lys Gly Val 265 Ala Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr 280 285 Thr Leu Arg Asn Gln Gln Val Lys Asp Ala Phe Lys Gln Val Leu Gln 295 300 Arg Leu Cys His Ser Gln Asn Ser Glu Leu Arg Phe Arg His Gln 310 315

```
<212> PRT
<213> Mus musculus
<400> 1882
Met Lys Asn Tyr Thr Ile Ile Thr Glu Phe Val Leu Leu Gly Ile Ser
                                    1.0
Gly Asn Arg Glu Leu Gln Val Val Ile Phe Val Phe Leu Leu Ile Thr
                               25
Tyr Ile Val Ser Ile Thr Gly Asn Leu Thr Ile Ile Leu Leu Thr Leu
                           40
Leu Asp Ser His Leu Lys Thr Pro Met Tyr Tyr Phe Leu Arg Asn Phe
                        55
                                            60
Ser Phe Leu Glu Ile Met Phe Thr Ser Val Ser Ile Pro Arg Phe Leu
                    70
                                        75
Ala Ser Ile Ile Thr Gln Val Lys Thr Ile Ser Tyr Asn Asn Cys Phe
                85
Ala Gln Leu Phe Phe Phe Ile Phe Met Gly Val Thr Glu Phe Phe Leu
            100
                                105
Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                           120
                                                125
        115
His Tyr Thr Leu Ile Met Asn Gln Lys Val Cys Thr Leu Leu Val Leu
                       135
Thr Ser Trp Leu Ala Gly Phe Leu Thr Ile Phe Pro Pro Leu Met Leu
                   150
                                        155
Val Leu Lys Leu Asp Phe Cys Ala Ser Asn Val Ile Asp His Phe Cys
                                    170
               165
Cys Asp Tyr Phe Pro Leu Leu Gln Leu Ser Cys Ser Asp Thr Trp Leu
           180
                               185
                                                    190
Leu Glu Val Ile Gly Phe Tyr Val Ala Leu Val Thr Leu Leu Phe Thr
                            200
Leu Ala Leu Val Ile Leu Ser Tyr Met Tyr Ile Phe Arg Thr Ile Leu
                        215
Arg Ile Pro Ser Ala Asn Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Ile Val Ile Ser Met Ser Tyr Gly Ser Cys Ile Phe Ile
               245
                                    250
Tyr Val Lys Pro Ser Ala Asn Glu Arg Ala Ser Leu Thr Lys Thr Val
                               265
Ala Ile Leu Ser Thr Ser Val Ala Pro Met Leu Asn Pro Phe Ile Tyr
                           280
                                                285
Thr Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Lys Asp Leu Ile His
   290
                        295
Lys Val Val Phe
305
<210> 1883
<211> 313
<212> PRT
<213> Mus musculus
<400> 1883
Met Lys Asn Gln Ser Val Glu Ile Val Phe Ile Leu Leu Gly Leu Thr
                                    10
Asp Asp Pro Gln Leu Gln Ile Leu Ile Phe Leu Phe Met Phe Phe Asn
            20
                                25
                                                    30
```

<211> 308

```
Tyr Ile Leu Ser Leu Met Gly Asn Leu Val Ile Ile Phe Leu Thr Leu
                           40
Leu Asp Leu Arg Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
                       55
Ser Phe Leu Glu Ile Ala Phe Thr Thr Ala Cys Ile Pro Arg Phe Leu
Met Ser Ile Leu Thr Gly Asp Lys Thr Ile Thr Tyr Asn Ala Cys Val
               8.5
                                   90
Ala Gln Leu Phe Phe Phe Leu Leu Ile Thr Glu Phe Tyr Leu
                               105
Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu
                           120
His Tyr Pro Ile Ile Met Asn Ser Lys Val Cys His Ile Leu Val Leu
   130
                       135
                                           140
Ser Ser Trp Met Thr Gly Phe Leu Ser Ile Phe Pro Pro Leu Met Leu
                   150
                                       155
Gly Leu Lys Leu Glu Phe Cys Ala Ser Lys Thr Val Asp His Phe Leu
                                   170
               165
Cys Asp Thr Ser Pro Val Leu Gln Leu Ser Cys Thr Asp Thr Arg Phe
                                185
Ile Glu Trp Met Ala Phe Val Ile Ala Ile Met Thr Leu Ile Ile Thr
       195
                           200
                                                205
Leu Ile Leu Val Ile Leu Ser Tyr Thr Leu Ile Ile Lys Thr Ile Leu
                       215
Lys Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                   230
                                       235
Ser His Met Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Met
                                   250
               245
Tyr Ile Lys Thr Ser Ala Lys Glu Arg Val Ser Leu Asn Lys Gly Val
                               265
           260
Ala Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
                           280
Thr Leu Arg Asn Gln Gln Val Lys Asp Ala Phe Lys Gln Val Leu Gln
                       295
Arg Leu Cys His Tyr Gln Thr Val Asn
                    310
```

```
<210> 1884
<211> 319
<212> PRT
```

<213> Mus musculus

<400> 1884

 Met
 Lys
 Asn
 Gln
 Ser
 Leu
 Lys
 Ile
 Glu
 Phe
 Ile
 Leu
 Leu
 Gly
 Leu
 Thr

 Asp
 Asp
 Pro
 Gln
 Leu
 Gln
 Ile
 Pro
 Ile
 Phe
 Leu
 Phe
 Leu
 Phe
 Phe
 Asn
 30
 Asn
 Asn
 Tyr
 Met
 Ile
 Ile
 Phe
 Leu
 Phe
 Phe
 Asn
 Asn
 Asn
 Tyr
 Met
 Ile
 Ile
 Phe
 Leu
 Thr
 Leu
 Asn
 Phe
 Phe
 Asn
 Phe
 Phe
 Leu
 Asn
 Phe
 Phe
 Leu
 Asn
 Phe
 Phe
 Leu
 Asn
 Phe
 Asn
 Phe
 Phe
 Leu
 Asn
 Phe
 As

```
100
                               105
Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu
                           120
                                               125
His Tyr Pro Ile Ile Met Asn Ser Lys Val Cys His Gln Leu Val Leu
                       135
Ser Ser Trp Val Thr Gly Phe Leu Val Val Phe Pro Gly Leu Leu
                   150
Gly Leu Lys Leu Asp Phe Cys Ala Ser Lys Thr Ile Asp His Phe Leu
               165
                                   170
Cys Asp Ser Ser Pro Leu Leu Gln Leu Ser Cys Thr Asp Thr His Phe
                               185
Ile Glu Leu Leu Asp Phe Ala Leu Ala Val Met Thr Leu Val Ile Thr
                           200
                                                205
Leu Ile Leu Val Ile Leu Ser Tyr Thr Leu Ile Ile Lys Thr Ile Leu
                       215
                                           220
Lys Phe Pro Ser Ala Gln Gln Arg Arg Lys Ala Phe Ser Thr Cys Thr
                   230
                                       235
Ser His Met Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Met
               245
                                    250
Tyr Met Lys Thr Ser Ala Lys Glu Arg Val Thr Leu Asn Lys Gly Val
                               265
Ala Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
                           280
Thr Leu Arg Asn Gln Gln Val Lys Glu Ala Phe Lys His Val Leu His
                       295
Arg Phe Cys Ser Leu Gln Asn Ser Glu Thr Arg Phe Arg His Lys
                   310
                                        315
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1885

Met Asn His Thr Glu Ile Thr Glu Phe Ile Leu Leu Gly Leu Ser Asp 10 Asp Pro Asp Leu Gln Ile Val Ile Phe Leu Phe Leu Leu Ile Thr Tyr 25 Met Leu Ser Val Ile Gly Asn Leu Thr Ile Ile Val Leu Thr Phe Ile 40 Asp Thr His Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe Ala 55 Phe Leu Glu Val Ser Phe Thr Ser Val Cys Ile Pro Arg Phe Leu Gly 70 75 Ser Ile Val Thr Arg Asn Lys Thr Ile Ser Tyr Asn Asn Cys Ala Ala Gln Leu Phe Phe Ile Phe Met Gly Val Cys Glu Phe Tyr Ile Leu 105 Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His 120 125 Tyr Thr Thr Ile Met Asn Arg Lys Leu Cys Thr Leu Phe Val Leu Cys 135 Ala Trp Leu Ala Gly Phe Leu Thr Val Phe Pro Pro Leu Met Leu Leu 150 155 Leu Gln Gln Asp Tyr Cys Ala Ser Asn Val Ile Asp His Phe Ala Cys 165 170

Asp Phe Phe Pro Leu Leu Gln Leu Ser Cys Ser Asp Thr Leu Phe Leu 180 185 Glu Val Ile Gly Phe Tyr Val Ala Leu Val Ala Leu Leu Phe Thr Leu 200 Ala Leu Val Ile Leu Ser Tyr Met Tyr Ile Ile Arg Thr Ile Leu Arg 215 Ile Pro Ser Thr Ser Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser 230 235 His Met Ile Val Ile Ser Leu Ser Tyr Gly Ser Cys Ile Phe Met Tyr 245 250 Ala Asn Pro Ser Ala Lys Glu Lys Ala Ser Leu Thr Lys Gly Val Ala 265 Ile Leu Asn Thr Ser Val Val Pro Met Leu Asn Pro Phe Ile Tyr Thr 280 Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Lys Gly Ala Val His Lys 295 300 Leu Val Phe Ser Val Ser Lys

<210> 1886 <211> 312 <212> PRT

<213> Mus musculus

<400> 1886

Met Lys Asn His Thr Arg Val Thr Val Phe Ile Ile Ala Gly Leu Thr 10 Asp Asp Pro Gln Trp Lys Val Val Leu Phe Ile Phe Leu Leu Thr 25 Tyr Leu Leu Ser Ile Thr Gly Asn Leu Ala Ile Ile Thr Leu Thr Leu 40 Val Asp Thr His Leu Lys Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe 55 Ser Phe Leu Glu Phe Ser Tyr Thr Thr Thr Cys Ile Pro Lys Leu Leu 75 Val Thr Met Ala Thr Gly Asp Lys Thr Ile Ser Tyr Gly Asn Cys Leu 8.5 90 Thr Gln Val Phe Phe Ala Phe Leu Phe Gly Ala Ser Glu Phe Tyr Leu 105 Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 115 120 125 His Tyr Met Thr Ile Met Asn Asn Lys Val Cys Val Gln Leu Val Leu 135 140 Ser Cys Trp Leu Ala Gly Phe Phe Val Ile Phe Pro Pro Leu Leu 150 155 Gly Leu Asn Leu Asp Phe Cys Ala Ser Asn Ile Val Asp His Phe Tyr 165 170 Cys Asp Thr Thr Pro Leu Leu Gln Leu Ser Cys Thr Asp Thr Gln Leu 185 Leu Glu Thr Met Gly Phe Val Ser Ala Leu Val Thr Leu Leu Leu Thr 195 200 205 Leu Val Met Val Ile Val Ser Tyr Ile Tyr Ile Ala Ile Thr Ile Leu 215 220 Lys Ile Pro Ser Ala Ser Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser 230 235 Ser His Met Ile Val Ile Ser Leu Ser Tyr Gly Ser Cys Ile Phe Met

```
245
                                    250
Tyr Val Lys Pro Ser Val Lys Gln Arg Val Ser Ile Ser Lys Gly Ile
            260
                               265
Ser Val Leu Asn Thr Ser Val Ala Pro Leu Leu Asn Pro Phe Ile Tyr
                            280
Thr Leu Arg Asn Gln Gln Val Lys Lys Ala Phe Ile Asn Thr Val His
                        295
Arg Ile Val Ser Phe Ser Lys Lys
                    310
<210> 1887
<211> 312
<212> PRT
<213> Mus musculus
<400> 1887
Met Arg Asn His Thr Glu Thr Thr Glu Phe Ile Leu Leu Gly Leu Ser
Asp Asp Pro Lys Leu Gln Val Val Ile Phe Val Phe Leu Phe Ile Thr
            20
Tyr Thr Leu Ser Ile Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu
                            40
Leu Asp Ser His Leu Gln Thr Pro Met Tyr Phe Phe Leu Arg Asn Phe
Ala Thr Leu Glu Val Ser Phe Thr Thr Val Cys Ile Pro Arg Phe Leu
                    70
                                        75
Gly Thr Ile Ile Ser Gly Asp Lys Thr Ile Ser Phe Asn Asn Cys Ile
                                    90
Ala Gln Leu Phe Phe Leu Ile Leu Phe Gly Val Thr Glu Phe Tyr Leu
           100
                                105
Leu Ala Ala Met Ser Tyr Asp Arg Tyr Ile Ala Ile Cys Lys Pro Leu
                           120
                                                125
His Tyr Leu Thr Ile Met Ser Gln Lys Val Cys Lys Met Leu Val Phe
                        135
                                            140
Ala Ser Trp Leu Val Ser Phe Leu Ile Ile Phe Pro Ala Leu Met Leu
                    150
                                        155
Leu Leu Gln Leu Asp Tyr Cys Val Ser Asn Ile Ile Asp His Tyr Thr
               165
                                    170
Cys Asp Tyr Phe Pro Leu Leu Gln Leu Ser Cys Ser Asp Thr Lys Phe
                               185
Leu Glu Lys Met Gly Phe Ser Cys Ala Val Phe Thr Leu Met Phe Thr
       195
                           200
Leu Ala Leu Val Phe Trp Ser Tyr Thr Tyr Ile Ile Arg Thr Ile Val
                       215
                                            220
Lys Ile Pro Ser Ala Ser Gln Arg Ser Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Met Ile Val Ile Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met
                245
                                    250
Tyr Ile Lys Pro Ser Ala Ala Asp Arg Ala Ser Leu Thr Lys Gly Val
                                265
Ala Ile Leu Asn Thr Ser Val Ala Pro Met Leu Asn Pro Phe Ile Tyr
                           280
Ser Leu Arg Asn Gln Gln Val Arg Gln Ala Phe Met Asn Met Ala Arg
                       295
                                            300
Lys Met Val Phe Phe Thr Ser Lys
```

310

```
<211> 311
<212> PRT
<213> Mus musculus
<400> 1888
Met Arg Asn His Thr Ile Thr Thr Phe Ile Leu Leu Gly Leu Thr Asp
                                   1.0
Asp Pro Gln Leu Lys Thr Leu Ile Phe Ile Phe Leu Phe Leu Ser Tyr
                                25
Val Leu Ser Met Thr Gly Asn Leu Thr Ile Ile Ser Leu Thr Phe Ile
Asp Pro His Leu Lys Thr Ala Met Tyr Phe Phe Leu Gln Asn Phe Ser
                        55
                                            60
Phe Leu Glu Ile Ser Phe Thr Thr Ala Cys Ile Pro Arg Tyr Leu Tyr
                                        75
Asn Ile Ser Thr Gly Asp Lys Thr Ile Thr Tyr Asn Asn Cys Ala Ile
                85
                                    90
Gln Ile Phe Cys Val Asp Leu Phe Gly Val Thr Glu Phe Phe Leu Leu
                                105
                                                    110
Ala Ile Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His
                           120
                                                125
Tyr Ser Thr Ile Met Ser Ser Arg Ile Cys Thr Arg Leu Ile Leu Cys
                       135
                                            140
Cys Trp Ala Ala Gly Leu Phe Val Ile Leu Pro Pro Leu Ser Leu Gly
                   150
                                        155
Leu Lys Leu Glu Phe Cys Asp Ser Asn Val Ile Asp His Phe Val Cys
               165
                                    170
                                                        175
Asp Ala Asn Pro Leu Lys Ile Ser Cys Thr Glu Thr Trp Leu Ile
           180
                                185
                                                    190
Glu Gln Ile Val Ile Val Cys Ala Val Phe Thr Phe Ile Met Thr Leu
                            200
                                                205
Val Cys Val Ser Leu Ser Tyr Ile Tyr Ile Ile Arg Thr Ile Leu Arg
                        215
Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser
                    230
                                        235
His Met Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile Tyr
                245
                                    250
Ile Lys Pro Ser Ala Lys Asp Ser Val Thr Ile Asn Lys Gly Val Thr
            260
                                265
                                                    270
Ile Leu Thr Thr Ser Ile Ala Pro Met Leu Asn Pro Phe Ile Tyr Thr
                           280
                                                285
Leu Arg Asn Lys Gln Val Lys Gln Ala Phe Asn Asp Ser Val Lys Arg
                        295
                                            300
Ile Val Leu Phe Phe Gln Lys
305
                    310
<210> 1889
<211> 317
<212> PRT
<213> Mus musculus
```

Met Lys Asn Asn Thr Ile Thr Thr Phe Ile Leu Leu Gly Leu Thr Asp

<210> 1888

<400> 1889

```
10
Asp Pro Gln Leu Gln Ile Pro Ile Phe Val Phe Leu Phe Phe Ala Tyr
                               25
Met Leu Ser Ile Thr Gly Asn Leu Thr Ile Ile Ser Leu Thr Ile Leu
Asp Ser His Leu Lys Thr Pro Met Tyr Phe Phe Leu Gln Asn Phe Ser
                       55
Ile Leu Glu Ile Ser Phe Thr Ser Ala Cys Ile Pro Arg Tyr Leu Tyr
                   70
                                       75
Asn Ile Ala Thr Gly Asp Arg Ser Ile Thr Tyr Asn Val Cys Val Ile
               85
                                   90
Gln Val Phe Phe Thr Asp Val Phe Gly Val Ile Glu Phe Phe Leu Leu
           100
                              105
Ala Ile Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His
                          120
                                              125
       115
Tyr Val Thr Ile Met Ser Ser Lys Val Cys Gln Thr Leu Val Leu Cys
                      135
Cys Trp Ser Ala Gly Leu Leu Ile Ile Leu Pro Pro Leu Thr Leu Phe
                   150
                                       155
Leu Asn Leu Arg Phe Cys Asp Ser Asn Val Ile Asp Tyr Phe Phe Cys
                                   170
Asp Ala Ser Pro Ile Leu Lys Ile Ser Cys Ser Asp Thr Trp Leu Ile
          180
                               185
Glu Gln Leu Val Ile Val Cys Ala Val Leu Thr Phe Ile Leu Thr Leu
                           200
Val Cys Val Thr Leu Ser Tyr Val His Ile Ile Lys Thr Ile Leu Arg
                       215
                                           220
Phe Pro Ser Ala Gln Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser Ser
                   230
                                       235
His Met Ile Val Val Ser Ile Thr Tyr Gly Ser Cys Ile Phe Ile Tyr
               245
                                   250
Ile Asn Pro Ser Ala Lys Glu Ser Val Ala Ile Asn Lys Gly Val Ala
                               265
Val Leu Met Thr Ser Ile Ala Pro Met Leu Asn Pro Phe Ile Tyr Thr
                           280
Leu Arg Asn Lys Gln Val Arg Gln Ala Phe Ser Asp Ser Phe Lys Lys
                       295
Ile Ala Ile Ile Ser Met Lys Lys Glu Asn Val Gln Ile
                   310
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1890

 Met Arg Asn His Ser Met Val Thr Glu Phe Leu Leu Ser Gly Ile Ser

 1
 5
 10
 15

 Asp Thr Pro Glu Val Gln Val Val Ile Phe Ile Leu Leu Phe Ile Ala 20
 25
 30

 Tyr Ile Leu Ser Val Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu 35
 40
 45

 Leu Asp Ser Gln Leu Lys Thr Pro Met Tyr Phe Phe Leu Gln Asn Phe 50
 55
 60

 Ser Phe Leu Glu Ile Ile Phe Thr Ser Val Ser Val Pro Arg Phe Leu 65
 70
 75

```
Gly Ser Ile Ile Thr Glu Val Lys Thr Ile Ser Tyr Asn Asn Cys Leu
               8.5
                                   90
Thr Gln Leu Tyr Phe Phe Leu Ser Leu Gly Val Ser Glu Phe Phe Leu
                               105
Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                           120
                                               125
His Tyr Val Ile Ile Met Asn Gln Lys Val Cys Thr Leu Leu Val Leu
                       135
Thr Ser Trp Leu Ile Gly Phe Leu Ser Ile Phe Pro Leu Ile Met Leu
                   150
                                       155
Ile His Lys Leu Asp Phe Cys Ala Ser Asn Thr Ile Asp His Phe Cys
               165
                                   170
Cys Asp Tyr Phe Pro Ile Leu Gln Leu Ser Cys Ser Asp Thr Arg Leu
           180
                               185
Leu Glu Ala Phe Gly Phe Tyr Cys Ala Ser Ile Thr Leu Leu Phe Thr
       195
                           200
                                               205
Leu Ala Leu Val Ile Leu Ser Tyr Ile Cys Ile Ile Asn Thr Ile Leu
                       215
                                            220
Arg Phe Pro Ser Ala Ser Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
                                       235
                    230
Ser His Met Ile Val Ile Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met
                245
                                    250
Tyr Val Lys Pro Ser Ala Asn Glu Arg Ala Ser Leu Thr Lys Gly Val
           260
                               265
Ala Val Leu Asn Thr Ser Ile Ala Pro Met Leu Asn Pro Phe Ile Tyr
                           280
                                               285
Thr Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Lys Asp Phe Ile Asn
                       295
                                            300
Lys Val Met Phe Asn Arg Asn Lys
                    310
```

<210> 1891 <211> 312 <212> PRT

<213> Mus musculus

<400> 1891

Met Arg Asn His Ser Met Val Thr Glu Phe Val Leu Leu Gly Ile Ser 10 Asp Thr Pro Glu Val Gln Val Val Ile Phe Ile Leu Leu Phe Ile Ala 2.0 25 Tyr Ile Leu Ser Val Thr Gly Asn Leu Thr Ile Ile Thr Leu Thr Leu 40 Leu Asp Ser Gln Leu Lys Thr Pro Met Tyr Phe Phe Leu Gln Asn Phe 55 Ser Phe Leu Glu Ile Ile Phe Thr Ser Val Ser Ile Pro Arg Phe Leu 70 75 Glu Ser Ile Ile Thr Lys Val Lys Thr Ile Ser Tyr Asn Asn Cys Leu Thr Gln Leu Tyr Phe Phe Leu Ser Leu Gly Val Ser Glu Phe Phe Leu 100 105 Leu Thr Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Val Ile Ile Met Asn Gln Lys Val Cys Thr Leu Leu Val Leu 135 140 Thr Ser Trp Leu Ile Gly Phe Leu Ser Ile Phe Pro Leu Ile Met Leu

```
145 . 150
                      155
                                      160
Ile His Lys Leu Asp Phe Cys Ala Ser Asn Thr Ile Asp His Phe Cys
      165 170
Cys Asp Tyr Phe Pro Ile Leu Gln Leu Ser Cys Ser Asp Thr Arg Leu
         180
                          185
Leu Glu Ala Phe Gly Leu Tyr Cys Ala Ser Ile Thr Leu Leu Phe Thr
                       200
Leu Ala Leu Val Ile Leu Ser Tyr Ile Cys Ile Ile Asn Thr Ile Leu
                   215
                           220
Arg Phe Pro Ser Ala Ser Gln Arg Lys Lys Ala Phe Ser Thr Cys Ser
               230
                                235
Ser His Met Ile Val Ile Ser Ile Ser Tyr Gly Ser Cys Ile Phe Met
         245 250
Tyr Val Lys Pro Ser Ala Asn Glu Arg Ala Ser Leu Thr Lys Gly Val
     260
             265
Ala Val Leu Asn Thr Ser Ile Ala Pro Met Leu Asn Pro Phe Ile Tyr
 275 280
Thr Leu Arg Asn Gln Gln Val Lys Gln Ala Phe Lys Asp Leu Ile Asn
                                    300
                   295
Lys Leu Met Phe Asn Arg Asn Lys
                310
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1892

	_	-	•												
Met 1	Arg	Asn	His	Thr 5	Val	Thr	Thr	Phe	Ile 10	Leu	Leu	Gly	Leu	Thr 15	Asp
Asp	Pro	Gln	Leu 20	Lys	Thr	Leu	Ile	Phe 25	Ile	Phe	Leu	Phe	Leu 30	Ser	Tyr
Met	Leu	Ser 35	Met	Thr	Gly	Asn	Leu 40	Thr	Ile	Ile	Ser	Leu 45	Thr	Phe	Ile
Asp	Ser 50	His	Leu	Lys	Thr	Ala 55	Met	Tyr	Phe	Phe	Leu 60	Gln	Asn	Phe	Ser
Phe 65	Leu	Glu	Ile	Ser	Phe 70	Thr	Thr	Ala	Cys	Ile 75	Pro	Arg	Tyr	Leu	Tyr 80
Asn	Ile	Ser	Thr	Gly 85	Asp	Lys	Thr	Ile	Thr 90	Tyr	Asn	Asn	Cys	Val 95	Ile
Gln	Ile	Phe	Cys 100	Thr	Asp	Leu	Phe	Gly 105	Val	Thr	Glu	Phe	Phe 110	Leu	Leu
Ala	Ile	Met 115	Ser	Tyr	Asp	Arg	Tyr 120	Val	Ala	Ile	Cys	Lys 125	Pro	Leu	His
Tyr	Ser 130	Thr	Ile	Met	Ser	Ser 135	Arg	Ile	Cys	Ala	Arg 140	Leu	Ile,	Leu	Ser
Cys 145	Trp	Ala	Ala	Gly	Leu 150	Phe	Val	Ile	Leu	Pro 155	Pro	Leu	Ser	Leu	Gly 160
Leu	Lys	Leu	Lys	Phe 165	Cys	Asp	Ser	Asn	Val 170	Ile	Asp	His	Phe	Val 175	Cys
Asp	Ala	Asn	Pro 180	Leu	Leu	Lys	Ile	Ser 185	Cys	Thr	Glu	Thr	Trp 190	Leu	Ile
Glu	Gln	Ile 195	Val	Ile	Val	Ser	Ala 200	Val		Thr	Phe	Ile 205	Thr	Thr	Leu
Leu	Cys 210	Val	Ser	Leu	Ser	Tyr 215	Ile	Tyr	Ile	Ile	Arg 220	Thr	Ile	Leu	Arg

```
        Phe
        Pro
        Ser
        Ala
        Gln
        Gln
        Arg
        Lys
        Lys
        Ala
        Phe
        Ser
        Thr
        Cys
        Ser
        Ser
        240

        His
        Met
        Ile
        Val
        Ser
        Ile
        Thr
        Tyr
        Gly
        Ser
        Cys
        Ile
        Phe
        Ile
        Tyr
        Tyr
        250
        Lys
        Gly
        Phe
        Ile
        Tyr
        Tyr
        Tyr
        Ile
        Asn
        Lys
        Gly
        Val
        Met
        250
        Lys
        Gly
        Val
        Met
        250
        Lys
        Gly
        Val
        Met
        250
        Lys
        Gly
        Val
        Met
        Lys
        Asn
        Lys
        Gly
        Val
        Met
        Lys
        Asn
        Pro
        Phe
        Ile
        Arg
        Arg
        Asn
        Lys
        Arg
        Arg
        Arg
        Arg
        Ile
        Arg
        Arg
        Arg
        Ile
        Arg
        Arg
        Arg
        Ile
        Arg
        Arg
        Arg
        Arg
        Ile
        Arg
```

<210> 1893 <211> 313 <212> PRT <213> Mus musculus

<400> 1893

Met Ser Val Ala Asn Glu Ser Ile Ser Arg Glu Phe Ile Leu Leu Gly 10 Phe Ser Asp Arg Pro Trp Leu Glu Leu Pro Leu Phe Val Val Phe Leu 25 Val Ser Tyr Ile Leu Thr Ile Phe Gly Asn Met Met Ile Ile Leu Val 40 Ser Arg Leu Asp Ser Lys Leu His Thr Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Leu Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln 70 75 Met Leu Ile Asn Ile Cys Ser Thr Arg Lys Val Ile Ser Tyr Gly Gly 90 Cys Val Ala Gln Leu Phe Ile Phe Leu Ala Leu Gly Cys Thr Glu Cys 105 Phe Leu Leu Gly Val Met Ser Phe Asp Arg Phe Val Ala Ile Cys Arg 120 Pro Leu His Tyr Ser Val Ile Met His Gln Arg Arg Cys Leu Gln Leu 135 Ala Ala Cys Trp Ile Ser Gly Phe Ser Asn Ser Val Leu Gln Ser 150 155 Thr Trp Thr Leu Gln Met Pro Leu Cys Gly His Asn Arg Val Asp His 165 170 Phe Leu Cys Glu Ile Pro Ala Leu Leu Lys Leu Ser Cys Val Asp Thr 185 180 190 Thr Ala Ile Glu Ser Glu Gln Phe Phe Ile Ser Val Val Phe Leu Leu 200 205 Ile Pro Val Thr Leu Ile Leu Ile Ser Tyr Ala Phe Ile Val Gln Ala 215 220 Val Leu Arg Ile Arg Ser Ala Glu Gly Arg Arg Lys Ala Phe Gly Thr 230 235 Cys Gly Ser His Leu Ile Val Val Val Leu Phe Tyr Gly Thr Ala Ile 245 250 Tyr Met Tyr Leu Gln Pro Pro Ser Pro Thr Ser Lys Asp Arg Gly Lys 265 Met Val Ser Leu Phe Tyr Gly Ile Ile Thr Pro Met Leu Asn Pro Leu 280 Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Phe Lys Arg Leu

Val Thr Arg Ile Ile Leu Ser Arg Lys <210> 1894 <211> 313 <212> PRT <213> Mus musculus <400> 1894 Met Ser Trp Ala Asn Glu Ser Ile Thr Gly Glu Phe Val Leu Leu Gly Phe Ser Asp Gln Pro Trp Leu Glu Phe Pro Leu Phe Val Val Phe Leu 20 25 Thr Ser Tyr Ile Val Thr Ile Phe Gly Asn Leu Asn Ile Ile Leu Val Ser His Leu Asp Pro Lys Leu His Thr Pro Met Tyr Phe Phe Leu Thr Asn Leu Ser Val Ile Asp Leu Cys Tyr Ile Thr Cys Thr Val Pro Gln 75 Met Leu Val Asn Leu Arg Ser Ile Arg Lys Val Ile Ser Phe Gly Gly 90 85 Cys Val Val Gln Leu Phe Met Phe Leu Ala Leu Gly Ala Thr Glu Cys 105 Val Leu Leu Pro Val Met Ser Phe Asp Arg Phe Val Ala Ile Cys Arg 120 Pro Leu His Tyr Ser Val Ile Met His Gln Arg Leu Cys Leu Gln Leu 135 140 Ala Ala Val Ser Trp Ile Ile Gly Phe Gly Asn Ser Val Trp Leu Ser 150 155 Ile Leu Thr Leu Gln Leu Pro Arg Cys Gly His Tyr Val Ile Asp His 165 170 Phe Leu Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Val Asp Val 180 185 Thr Ala Asn Glu Ala Glu Leu Phe Phe Val Ser Val Phe Phe His Leu 200 205 Thr Pro Leu Ser Leu Ile Leu Thr Ser Tyr Ala Phe Ile Ala Arg Ala 215 220 Ile Leu Lys Ile Gln Ser Ala Glu Gly Arg Gln Lys Ala Phe Gly Thr 230 235 Cys Ser Ser His Leu Ile Val Val Ser Leu Phe Tyr Gly Thr Ala Leu 250 245 Ser Val Tyr Leu Leu Pro Pro Ser Pro His Ser Lys Asn Arg Arg Lys 260 265 Met Val Pro Leu Phe Tyr Gly Ile Ile Ala Pro Met Leu Asn Pro Leu 280 Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Asp Ala Phe Lys Arg Leu 295 Ile Lys Arg Val Phe Leu Ser Lys Asn

295

300

290

<210> 1895

<211> 317

<212> PRT

<213> Mus musculus

```
<400> 1895
Met Trp Leu Gln Val Met Glu Lys Glu Asn Thr Ser Ser Phe Glu Gly
Phe Ile Leu Val Gly Phe Ser Asp Arg Pro His Leu Glu Leu Ile Leu
                                25
Phe Val Val Leu Ser Phe Tyr Leu Leu Thr Leu Leu Gly Asn Met
                            40
Thr Ile Ile Leu Leu Ser Ala Leu Asp Ser Arg Leu His Thr Pro Met
                        55
Tyr Phe Phe Leu Ala Asn Leu Ser Phe Leu Asp Met Cys Phe Thr Thr
                    70
                                        75
Gly Ser Ile Pro Gln Met Leu Tyr Asn Leu Trp Gly Pro Asp Lys Thr
                85
                                    90
Ile Ser Tyr Val Gly Cys Ala Ile Gln Leu Tyr Phe Val Leu Ala Leu
           100
                                105
Gly Gly Val Glu Cys Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr
                            120
Ala Ala Val Cys Lys Pro Leu His Tyr Thr Val Ile Met His Pro Arg
                        135
                                            140
Leu Cys Gly Gln Leu Ala Ser Val Ala Trp Leu Ser Gly Phe Gly Asn
                    150
                                        155
Ser Leu Ile Met Ala Pro Gln Thr Leu Met Leu Pro Arg Cys Gly His
               165
                                    170
Arg Arg Val Asp His Phe Leu Cys Glu Met Pro Ala Leu Ile Gly Met
                               185
Ala Cys Val Asp Thr Met Ala Leu Glu Ala Leu Ala Phe Ala Leu Ala
                            200
                                                205
Ile Phe Ile Ile Leu Ala Pro Leu Ile Leu Ile Leu Ile Ser Tyr Gly
                        215
                                            220
Tyr Ile Ala Arg Ala Val Phe Arg Ile Lys Ser Ala Ala Gly Arg Arg
                   230 .
                                       235
Lys Ala Phe Asn Thr Cys Ser Ser His Leu Ile Val Val Ser Leu Phe
                                    250
                245
Tyr Gly Thr Ile Ile Tyr Met Tyr Leu Gln Pro Ala Asn Thr Tyr Ser
                                265
Gln Asp Gln Gly Lys Phe Leu Thr Leu Phe Tyr Thr Ile Val Thr Pro
        275
                            280
                                                285
Ser Val Asn Pro Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Glu
                       295
Ala Val Lys Lys Val Leu Gly Lys Gly Ser Ile Glu Val
                    310
```

```
<210> 1896
```

<400> 1896

 Met His Ala Leu Thr Val Asn Ala Met Ile Asn Gln Ser Cys Gln Glu

 1
 5
 10
 15

 Gln Phe Ile Leu Leu Gly Phe Ser Asp Arg Pro Arg Leu Glu Ser Ile
 20
 25
 30

 Leu Phe Val Phe Val Leu Ile Phe Tyr Leu Val Thr Leu Val Gly Asn
 35
 40
 45

 Ile Ile Ile Ile Leu Val Ser Tyr Leu Asp Pro Cys Leu His Thr Pro

<211> 314

<212> PRT

<213> Mus musculus

```
50
                        55
                                            60
Met Tyr Phe Phe Leu Thr Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr
                    70
                                        75
Thr Ser Ser Ile Pro Gln Leu Leu Phe Asn Leu Gly Gly Gln Asp Lys
                                    90
Ser Ile Ser Tyr Ile Gly Cys Ala Val Gln Leu Phe Met Phe Leu Gly
            100
                                105
Leu Gly Gly Thr Glu Cys Val Leu Leu Ala Val Met Ala Tyr Asp Arg
                           120
Phe Thr Ala Ile Cys Lys Pro Leu His Tyr Ser Val Ile Met His Ser
                        135
                                            140
Gln Leu Cys Trp Thr Leu Val Ser Val Ala Trp Ser Val Gly Leu Leu
                   150
                                        155
Asn Ser Leu Val Met Ser Pro Val Thr Met Lys Leu Pro Arg Cys Gly
               165
                                   170
Arg Cys Gln Val Arg His Phe Leu Cys Glu Met Pro Ala Leu Ile Lys
                                185
Ile Ala Cys Val Asp Thr Val Ala Val Glu Ser Thr Val Phe Ile Leu
                            200
Ser Val Ile Ile Val Leu Val Pro Leu Thr Leu Ile Leu Ile Ser Tyr
                        215
                                            220
Ser Tyr Ile Ala Leu Ala Val Met Arg Ile Lys Ser Ala Ser Gly Arg
                    230
                                        235
Arg Lys Ala Phe Asn Thr Cys Gly Ser His Leu Thr Val Val Ser Leu
                                    250
                245
Phe Tyr Gly Asn Ile Ile Tyr Met Tyr Met Gln Pro Gly His Lys Ala
                                265
Ser Gln Asp Gln Gly Lys Phe Leu Thr Leu Phe Tyr Asn Leu Val Thr
                            280
        275
                                                285
Pro Met Leu Asn Pro Val Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys
                        295
Gly Ala Leu Lys Arg Leu Val Thr Thr Lys
305
                    310
```

<211> 308

<212> PRT

<213> Mus musculus

<400> 1897

Met Gly Thr Ser Asn Val Ser Ser Asn Ser Asp Phe Ile Leu Met Gly 10 Leu Leu Ser Tyr Thr Gly Pro His Leu Val Leu Phe Phe Leu Met Ala 20 2.5 Thr Val Phe Ile Ile Gly Leu Leu Gly Asn Thr Thr Leu Leu Phe Leu Ile Ala Thr Asp Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ser Gln Leu Ser Leu Leu Asp Val Gly Phe Pro Leu Val Thr Ile Pro Lys 75 70 Val Val Ala Glu Phe Leu Gln Gly Gln Asn Val Ile Ser Phe Gly Gly 90 Cys Ala Thr Gln Met Phe Phe Leu Met Leu Met Gly Val Ser Glu Gly 100 105 Val Leu Leu Ser Leu Met Ser Tyr Asp Arg Tyr Val Ala Val Cys His 115 120

```
Pro Leu His Tyr Gln Val Leu Met Arg Asn Gln Val Cys Leu Val Met
                       135
Val Gly Ala Ser Trp Phe Ser Gly Ala Leu Val Ala Ser Ile Gln Thr
                   150
                                        155
Ser Ile Thr Leu Gln Phe Pro Tyr Cys Ala Ser His Thr Val Asp His
                                    170
Phe Phe Cys Glu Leu Pro Ala Leu Leu Lys Leu Ser Cys Ala Asp Thr
           180
                               185
Ser Ala Tyr Glu Leu Ala Leu Ser Ile Ser Gly Val Leu Ile Leu Leu
                           200
Leu Pro Leu Ser Leu Ile Phe Ile Ser Tyr Gly His Val Leu Gly Ala
                       215
                                            220
Val Leu Leu Met Arg Ser Ala Glu Ala Arg His Lys Ala Phe Thr Thr
                  230
                                       235
Cys Ser Ser His Val Thr Val Val Gly Leu Phe Phe Gly Ala Ala Val
               245
                                   250
Phe Ile Tyr Met Val Pro Gly Ser Tyr His Ser Pro Lys Gln Asp Asn
                                265
Val Val Ser Leu Phe Tyr Ser Leu Ile Thr Pro Thr Leu Asn Pro Leu
                            280
Ile Tyr Ser Leu Arg Asn Arg Glu Val Arg Met Ser Leu Gly Gln Gly
                       295
   290
Tyr Gly Gln Val
305
```

<210> 1898 <211> 309

<212> PRT

<213> Mus musculus

<400> 1898

Met Lys Thr Pro Ser Asn Ser Thr Glu Ala Asp Phe Ile Leu Leu Gly 10 Leu Phe Ser His Thr His Ala His Ser Leu Leu Ser Val Val Leu 25 Val Ile Phe Thr Ala Ser Leu Met Gly Asn Thr Leu Met Ile Leu Leu 40 Ile Cys Arg Asp Pro Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ser 55 60 Gln Leu Ser Leu Met Asp Met Met Leu Val Ser Thr Ile Val Pro Lys 70 75 Met Ala Ala Asn Tyr Leu Thr Ser Thr Arg Ser Ile Ser Pro Ala Gly 85 90 Cys Gly Ser Gln Ile Phe Leu Phe Leu Thr Leu Ala Gly Gly Glu Cys 100 105 Phe Leu Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys Phe 120 125 Pro Leu Arg Tyr His Val Leu Met Asn Pro Lys Leu Cys Ala Tyr Leu Thr Val Gly Ser Trp Leu Leu Gly Ala Ala Asp Gly Leu Met Gln Ala 150 155 Gly Thr Ile Leu Ser Phe Pro Phe Cys His Ser Arg Thr Ile Asn His 170 Phe Phe Cys Glu Ala Pro Ser Leu Val Arg Leu Ala Cys Ala Asp Thr 185 Lys Val Phe Glu Phe Phe Met Tyr Ile Cys Cys Ile Leu Met Leu Leu

195 200 Ile Pro Leu Ser Leu Val Leu Ala Ser Tyr Ser Leu Ile Leu Ala Thr 215 220 Val Leu Arg Met Arg Ser Ser Ala Ala Arg Lys Lys Ala Phe Thr Thr 230 235 Cys Ser Ser His Leu Ala Val Val Gly Leu Phe Tyr Gly Ala Ile Ile 250 Phe Ile Tyr Met Arg Pro Lys Ser His Gln Pro Gly Lys Ser Asp Lys 265 Val Val Ser Ala Phe Tyr Thr Ile Phe Thr Pro Val Leu Asn Pro Leu 280 Ile Tyr Ser Val Arg Asn Lys Glu Val Lys Gly Ala Leu Arg Lys Trp 290 295 Leu Gln Lys Thr Val 305

<210> 1899

<211> 308

<212> PRT

<213> Mus musculus

<400> 1899

Met Ser Asn His Thr Arg Val Thr His Phe Ile Leu Arg Gly Phe Ser 1.0 Asp Val Pro Gln Leu Arg Leu Val Leu Ile Pro Phe Phe Leu Leu Phe 25 Tyr Thr Phe Gly Ile Leu Gly Asn Phe Ser Ile Ile Thr Ala Val Ile 40 Arg Asp Ser Arg Leu His Ser Pro Met Tyr Phe Phe Leu Lys Asn Leu 55 Ser Phe Leu Asp Ile Cys Tyr Thr Ser Ala Thr Ile Pro Lys Ala Val 70 75 Val Ile Ser Leu Thr Gly Ser Gly Val Ile Ser Tyr Gln Glu Cys Val Ala Gln Leu Tyr Met Phe Ile Thr Leu Cys Gly Thr Glu Cys Phe Leu 100 105 Leu Thr Ala Met Ala Tyr Asp Arg Cys Leu Ala Ile Leu Arg Pro Leu 120 Ile Tyr Gly Thr Ile Met Ser His Lys Tyr Cys Ser Ala Leu Val Val 135 140 Thr Ala Trp Val Gly Gly Ala Ile Tyr Ser Ala Phe His Thr Phe Asn 150 155 Thr Phe Ser Leu Pro Tyr Cys Gly Pro Asn Val Val Asp His Phe Phe 165 170 Cys Asp Met Pro Pro Val Met Arg Leu Ser Cys Thr Asp Tyr His Leu 185 190 Asn Glu Glu Val Gly Phe Ala Val Ile Gly Cys Ile Ile Met Ser Ser Phe Ala Leu Thr Val Val Ser Tyr Ile Gly Ile Val Ala Thr Val Leu 215 220 Arg Ile Pro Ser Val Glu Gly Arg Trp Lys Ala Phe Ser Thr Cys Ser 230 235 Ser His Leu Thr Thr Val Ile Leu Phe Tyr Gly Thr Gly Ser Phe Val 245 250 Tyr Leu Arg Pro Ala Ser Gln Tyr Ser Pro Thr Leu Asp Pro Leu Ala 260 265 270

Ser Ile Phe Tyr Ser Val Val Thr Pro Ser Leu Asn Pro Val Ile Tyr 280 Cys Leu Arg Asn Lys Asp Met Lys Phe Ala Leu Gln Lys Leu Tyr Cys 290 295 Gly Arg Lys Tyr 305 <210> 1900

<211> 308 <212> PRT <213> Mus musculus

<400> 1900

Met Ser Asn His Thr Arg Val Thr His Phe Ile Leu Arg Gly Phe Ser 10 Asp Val Pro Gln Leu Arg Leu Met Ala Ile Pro Val Phe Leu Leu Ile 25 Tyr Thr Phe Gly Leu Leu Gly Asn Leu Ser Ile Ile Thr Ala Val Thr 40 Arg Asp Ser Arg Leu His Ser Pro Met Tyr Phe Phe Leu Lys Asn Leu 55 Ser Phe Leu Asp Ile Cys Tyr Thr Ser Ala Thr Ile Pro Lys Ala Val 70 75 Val Ile Ser Leu Thr Gly Ser Gly Val Ile Ser Tyr Gln Glu Cys Ala 85 90 Ala Gln Leu Tyr Ile Phe Leu Thr Phe Ser Ser Slu Cys Phe Leu 100 105 Leu Thr Ala Met Ala Tyr Asp Arg Cys Leu Ala Ile Leu Arg Pro Leu 115 120 125 Leu Tyr Gly Thr Ile Met Ser Gln Lys Tyr Cys Ser Ala Leu Val Val 135 Thr Ala Trp Val Gly Gly Ala Ile Tyr Ser Ala Phe His Thr Phe Asn 150 155 Thr Phe Ser Leu Pro Tyr Cys Gly Pro Asn Val Ile Asp His Phe Phe 170 Cys Asp Ile Pro Pro Val Met Arg Leu Ser Cys Thr Asp Tyr His Leu 185 Ser Glu Glu Val Gly Phe Ala Val Ser Ser Cys Ile Val Met Ser Ser 200 Phe Ala Leu Thr Val Val Ser Tyr Ile Gly Ile Val Ala Thr Val Leu 215 220 Arg Ile Pro Ser Val Glu Gly Arg Trp Lys Ala Phe Ser Thr Cys Ser 235 230 Ser His Leu Thr Thr Val Ile Leu Phe Tyr Gly Thr Gly Ser Phe Val 245 250 Tyr Leu Arg Pro Ala Ser Gln Tyr Ser Pro Thr Leu Gly Arg Leu Ala 265 270 Ser Ile Phe Tyr Ser Val Val Thr Pro Ser Leu Asn Pro Val Val Tyr 280 Cys Leu Arg Asn Lys Asp Met Lys Phe Ala Leu Gln Lys Leu Tyr Cys 290 295 Gly Arg Lys Tyr 305

```
<212> PRT
<213> Mus musculus
<400> 1901
Met Asn Leu Gly Asn Glu Ser Ala Pro Lys Ile Phe Ile Leu Leu Gly
Phe Ser Ser His Pro Trp Leu Glu Met Pro Leu Phe Ile Met Val Leu
                               25
Val Ala Tyr Val Cys Thr Val Leu Gly Asn Ile Ser Ile Ile Val Val
                           40
Ser Arg Arg Asp Pro Gln Leu Asp Ser Pro Met Tyr Phe Phe Leu Ser
                       55
Asn Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Thr Thr Ile Pro Gln
                   70
                                       75
Leu Leu Arg Asn Leu Trp Gly Pro Asp Lys Ser Ile Ser Tyr Gly Gly
               85
                                   90
Cys Val Thr Gln Phe Tyr Ile Phe His Phe Leu Gly Ala Thr Glu Cys
            100
                               105
Ile Leu Leu Ala Val Met Ser Leu Asp Arg Tyr Ile Ala Ile Cys Lys
                            120
Pro Leu Arg Tyr Pro Ala Ile Met His Gln Gln Leu Cys Ile Leu Leu
                       135
                                           140
Val Ser Met Ala Trp Leu Ser Gly Leu Ala Asn Ser Leu Leu Gln Ser
                  150
                                       155
Thr Leu Thr Val Lys Leu Pro Phe Cys Gly Asn Asn Lys Val Asp Asn
               165
                                   170
Phe Leu Cys Glu Val Pro Val Met Ile Lys Met Ser Cys Ala Asn Thr
                               185
           180
                                                   190
Ala Phe Asn Ile Ala Met Leu Ser Ile Val Gly Thr Phe Tyr Ser Leu
       195
                           200
                                               205
Val Pro Leu Ser Leu Ile Leu Ile Ser Tyr Gly Phe Ile Val Ala Thr
                        215
                                            220
Val Leu Arg Ile Arg Ser Ser Glu Gly Lys Lys Lys Ala Phe Asn Thr
                    230
                                        235
Cys Gly Ser His Val Val Val Thr Leu Phe Tyr Gly Pro Val Ile
                                   250
               245
Ser Met Tyr Val Gln Pro Ser Ser Ser Asn Ser Gln Asp Lys Asn Lys
                               265
Leu Leu Ser Leu Phe Tyr Ser Leu Val Thr Pro Met Leu Asn Pro Phe
                           280
                                               285
Ile Tyr Thr Leu Arg Asn Lys Asp Met Lys Gly Ala Met Lys Arg Leu
                       295
Leu Val Ser Leu Tyr His Lys Gly Ala Glu Gln Thr
                    310
<210> 1902
<211> 314
<212> PRT
<213> Mus musculus
<400> 1902
Met Glu Ile Asn Asn Lys Ser Ser Glu Thr Asp Phe Ile Leu Leu Gly
                                   10
Phe Ser Ser Arg Pro Gln Leu Glu His Ile Ile Ser Ala Val Val Phe
            20
                                25
```

<211> 316

```
Val Phe Tyr Ile Val Thr Leu Val Gly Asn Thr Thr Ile Ile Leu Val
                            40
Ser Tyr Leu Asp Ser Gln Leu His Thr Pro Met Tyr Phe Phe Leu Ser
                        55
Asn Leu Ser Phe Val Asp Leu Cys Tyr Thr Thr Ser Ile Val Pro Gln
Met Leu Val Asn Leu Trp Gly Pro Lys Lys Ser Ile Thr Tyr Gly Gly
                85
                                    90
Cys Val Leu Gln Phe Phe Phe Ala Leu Asp Leu Gly Ala Thr Glu Cys
                               105
Leu Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Ala Ala Val Cys Gln
                           120
Pro Leu His Tyr Thr Val Ile Met His Pro Val Leu Cys Gln Lys Met
                        135
                                            140
Val Leu Ser Ala Trp Leu Gly Gly Leu Gly Ser Ala Leu Ile Leu Cys
                   150
                                        155
Ser Leu Thr Leu Lys Leu Pro Arg Cys Gly His Arg Glu Val Asp Asn
                                   170
Phe Phe Cys Glu Met Pro Ala Leu Ile Lys Met Ala Cys Val Tyr Ser
            180
                                185
Arg Val Ile Glu Ile Val Val Phe Thr Leu Gly Val Ile Phe Leu Leu
                            200
                                                205
Val Pro Leu Ser Leu Ile Leu Ile Ser Tyr Ala Val Ile Thr Gln Ala
                        215
                                            220
Val Met Lys Ile Lys Ser Ala Thr Arg Trp Arg Lys Val Leu Asn Thr
                   230
                                        235
Cys Gly Ser His Leu Thr Val Val Thr Leu Phe Tyr Gly Thr Leu Ile
               245
                                   250
Tyr Met Tyr Met Lys Pro Gln Asn Thr Ile Ser His Glu Glu Gly Gln
           260
                                265
Phe Phe Thr Leu Phe Tyr Thr Ile Val Thr Pro Ser Leu Asn Pro Leu
                           280
                                               285
Ile Tyr Thr Leu Arg Asn Lys Asp Val Lys Asn Ala Val Lys Arg Ile
                        295
Leu Gly Met Asp Lys His Ser Gly Lys Val
```

<211> 316

<212> PRT

<213> Mus musculus

<400> 1903

 Met
 Ser
 Val
 Asn
 Arg
 Ile
 Ser
 Ala
 Asp
 Phe
 Pro
 Glu
 Asp
 Phe
 Ile
 Leu

 Met
 Gly
 Phe
 Thr
 Lys
 Tyr
 Pro
 Trp
 Leu
 Asp
 Leu
 Phe
 Leu
 Phe
 Phe
 Phe
 Val
 Asp
 Ile
 Asp
 Ile
 Ala
 Ile
 Ile

```
100
                               105
Glu Cys Val Leu Leu Gly Ile Met Ala Leu Asp Arg Tyr Val Ala Val
                           120
                                               125
Cys Lys Pro Leu Arg Tyr Ser Val Ile Met Asp His Arg Leu Cys Leu
                       135
Gln Leu Ser Gly Ala Ala Trp Leu Thr Gly Leu Ala Asn Ser Leu Leu
                    150
                                        155
Gln Ser Thr Leu Thr Ile Gln Leu Pro Leu Cys Gly Asn Arg Met Leu
               165
                                   170
Asp His Phe Phe Cys Glu Leu Pro Gly Leu Ile Lys Met Ser Cys Gly
                               185
Asp Thr Thr Val Asn Glu Val Thr Leu Ala Val Val Ala Thr Phe Phe
       195
                        200
Ile Met Gly Pro Leu Ser Met Ile Leu Val Ser Tyr Ser Tyr Ile Ala
                       215
                                           220
Gln Thr Val Phe Arg Met Pro Ser Ala Ala Gly Arg Leu Lys Ala Phe
                   230
                                       235
Asn Thr Cys Ser Ser His Leu Leu Val Val Ser Leu Phe Tyr Gly Pro
                                    250
                245
Gly Ile Tyr Ile Tyr Met Gln Pro Ser Glu Asp Gly Ser Gln Asp Leu
                                265
Ile Lys Val Leu Thr Leu Phe Tyr Cys Val Ile Thr Pro Met Ala Asn
                           280
                                               285
Pro Phe Ile Tyr Thr Leu Arg Asn Lys Asp Val Ile Gly Ala Leu Lys
                       295
Arg Leu Leu Arg Lys Ala Ile Ser Thr Lys Gly Ile
                    310
```

<211> 316

<212> PRT

<213> Mus musculus

<400> 1904

Met Ala Tyr Glu Val Met Asn Gln Thr Ser Ala Thr Thr Phe Ile Leu 10 Val Gly Phe Ser Glu Tyr Pro Gln Leu Gln Ile Pro Leu Phe Leu Leu 25 Phe Leu Thr Ile Tyr Ser Val Thr Leu Met Gly Asn Leu Gly Ile Leu 4.0 Val Val Ile Lys Gly Asn Pro Lys Leu His Thr Pro Met Tyr Phe Phe Leu Ser His Leu Ser Phe Leu Asp Ile Cys Tyr Ser Ser Val Phe Thr 70 75 Pro Lys Leu Leu Gln Ile Leu Ile Met Glu Asp Arg Thr Ile Ser Phe Ile Gly Cys Met Ile Gln Phe Phe Ile Cys Thr Phe Val Ile Thr 100 105 Glu Met Phe Met Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val 115 120 125 Cys Asn Pro Leu Leu Tyr Thr Val Val Met Pro Phe Gln Phe Cys Ala 135 Leu Leu Val Ala Gly Thr Tyr Met Ile Gly Gly Leu Cys Ala Val Ile 150 155 Leu Ile Tyr Thr Leu Leu Gln Leu Ser Tyr Cys Glu Tyr Gly Ile Ile 170

```
Asn His Phe Gly Cys Glu Tyr Ser Ala Val Ile Ser Val Ser Cys Ser
           180
                               185
Asp Ser Ser Phe Ser Gln Leu Ala Cys Leu Val Ile Ser Ile Phe Ser
                           200
Glu Ser Ser Val Leu Ile Thr Leu Ala Ser Tyr Val Phe Ile Val
                       215
Val Thr Ile Ile Lys Met Pro Ser Lys Gly Gly Leu Arg Lys Ala Phe
                   230
                                       235
Ser Thr Cys Thr Ser His Leu Thr Ala Ile Ser Ile Phe His Gly Ile
               245
                                   250
Ile Leu Leu Tyr Cys Val Pro Asn Ser Asn Ser Ser Arg Leu Phe
           260
                               265
Val Lys Val Ala Thr Ala Leu Tyr Thr Val Met Ile Pro Met Leu Asn
                           280
                                               285
Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Asp Thr Val Arg
                      295
                                          300
Arg Leu Ile Ser Ser Lys Leu His Ser His Leu Thr
                   310
```

<210> 1905 <211> 312 <212> PRT

<213> Mus musculus

<400> 1905

Met Ile Asn Gln Ser Ser Val Thr Thr Phe Ile Leu Val Gly Phe Ser 10 Glu Tyr Pro His Leu Gln Pro Pro Leu Phe Leu Met Val Met Thr Ile 2.0 25 Tyr Thr Val Thr Leu Val Gly Asn Val Gly Ile Ile Leu Val Arg Arg 40 Ile Asn Pro Lys Leu His Thr Pro Met Tyr Phe Phe Leu Ser His Leu 55 Ser Phe Leu Asp Ile Cys Tyr Ser Ser Val Val Thr Pro Lys Leu Leu 75 Glu Ile Leu Ile Val Glu His Arg Thr Ile Ser Leu Asn Gly Cys Met 85 90 Thr Gln Phe Phe Gly Cys Ala Cys Val Ile Thr Glu Met Phe Met 105 Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala Val Cys Asn Pro Leu 115 120 Leu Tyr Thr Val Ala Met Ser His Gln Leu Cys Ala Leu Leu Val Ala 135 140 Gly Ser Tyr Met Trp Gly Gly Leu Cys Ala Val Ile Ile Thr Tyr Thr 150 155 Leu Val Glu Leu Ser Tyr Cys Glu Pro Gly Ile Ile Asp His Phe Gly 165 170 Cys Glu Tyr Ser Ala Ile Val Ser Val Ser Cys Ser Asp Pro Ser Phe 185 190 Ser Gln Met Val Cys Leu Val Ile Ser Ile Leu Ser Glu Gly Ser Ser 200 205 Leu Leu Ile Thr Met Ala Ser Tyr Val Phe Ile Val Val Thr Ile Ile 215 220 Lys Met Pro Ser Lys Asp Gly Leu Arg Lys Ala Phe Ser Thr Cys Thr 230 235 240 Ser His Leu Thr Ala Ile Ser Ile Phe His Gly Ile Ile Leu Leu Leu

245 250 Tyr Cys Ile Pro Asn Ala Lys Ser Ser Lys Leu Leu Val Lys Val Ala 265 Thr Val Leu Tyr Thr Val Leu Ile Pro Met Leu Asn Pro Leu Ile Tyr 280 Ser Leu Arg Asn Lys Asp Val Lys Glu Thr Val Lys Arg Leu Ile Ser 295 Ser Lys Leu His Ser Gln Thr Ile 310 <210> 1906 <211> 303 <212> PRT <213> Mus musculus <400> 1906 Met Tyr Asn His Thr Met Thr Glu Phe Ile Leu Phe Gly Leu Thr Gln Asp Pro Glu Gln Gln Lys Ala Ile Phe Gly Val Phe Leu Ile Leu Tyr 25 Leu Met Thr Leu Met Gly Asn Phe Leu Ile Met Val Thr Ile Lys Met Ser Gln Thr Leu Gly Ser Pro Met Tyr Phe Phe Leu Phe Tyr Leu Ser 55 Phe Ala Asp Ala Cys Phe Ser Thr Thr Thr Ala Pro Arg Leu Ile Ala 70 75 Asp Ala Leu Leu Gln Lys Lys Ile Ile Thr Tyr Asn Glu Cys Met Thr 90 85 Gln Val Phe Ala Val His Phe Phe Gly Cys Met Glu Ile Phe Val Leu 105 Ile Leu Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Arg 120 125 Tyr Thr Ala Ile Met Ser Gln Tyr Ile Cys Gly Val Leu Val Ile Leu 135 140 Ala Trp Ile Gly Ser Cys Ile His Ser Ser Ala Gln Ile Phe Leu Ala 150 155 Leu Arg Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe Cys 165 170 Asp Leu Gln Pro Leu Lys Leu Ala Cys Met Asp Thr Tyr Val Ile 180 185 190 Asn Leu Leu Val Val Ser Asn Ser Gly Ala Ile Cys Thr Val Ser Phe 200 205 Ile Val Leu Leu Ile Ser Tyr Ile Val Ile Leu Tyr Ser Leu Arg Ser 215 His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Thr Ser His 230 235 Ile Ile Val Val Ile Leu Phe Phe Gly Pro Cys Ile Phe Ile Tyr Thr 245 250 Arg Pro Pro Thr Thr Phe Pro Ile Asp Lys Met Val Ser Leu Phe Tyr 265 Thr Ile Gly Thr Pro Val Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn 280 Ala Glu Val Lys His Ala Met Lys Lys Leu Trp Gly Asn Lys Val

295

```
<211> 303
<212> PRT
<213> Mus musculus
<400> 1907
Met His Asn Tyr Ser Val Thr Glu Phe Ile Leu Phe Gly Leu Thr Gln
Asp Pro Glu Lys Gln Lys Ala Ile Phe Gly Val Phe Leu Ile Leu Tyr
                                25
Leu Met Thr Leu Ile Gly Asn Phe Leu Ile Val Met Thr Ile Lys Met
                           40
Ser Gln Thr Leu Gly Ser Pro Met Tyr Phe Phe Leu Phe Tyr Leu Ser
                       55
Phe Ala Asp Ala Cys Phe Ser Thr Thr Thr Ala Pro Arg Leu Ile Ile
                   70
                                        75
Asp Ala Leu Ser Gln Lys Lys Ile Ile Thr Tyr Asn Glu Cys Met Thr
                85
                                    90
Gln Val Phe Ala Ala His Phe Phe Gly Cys Met Glu Ile Phe Val Leu
                                105
Ile Leu Met Ala Ile Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu Arg
                            120
                                               125
Tyr Thr Thr Ile Met Ser Gln Arg Ile Cys Gly Ile Leu Val Ile Leu
                       135
Ala Trp Val Gly Ser Cys Ile His Ser Ser Ala Gln Ile Phe Leu Ala
                   150
                                        155
Leu Arg Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe Cys
               165
                                   170
Asp Leu Gln Pro Leu Leu Lys Leu Ala Cys Met Asp Thr Tyr Val Ile
                               185
           180
Asn Leu Leu Val Val Ser Asn Ser Gly Ala Ile Cys Met Val Ser Phe
                            200
Thr Leu Leu Ieu Ile Ser Tyr Ile Phe Ile Leu Tyr Ser Leu Arg Asn
                        215
His Ser Val Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Thr Ser His
                    230
                                        235
Phe Ile Val Val Ile Phe Phe Gly Pro Cys Ile Phe Ile Tyr Thr
                245
                                   250
Arg Pro Pro Thr Thr Phe Pro Ile Asp Lys Met Val Ser Val Phe Tyr
                                265
            260
Thr Ile Gly Thr Pro Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn
                            280
Ala Glu Val Lys Ile Ala Met Lys Lys Leu Trp Cys Gly Lys Val
                        295
<210> 1908
<211> 317
<212> PRT
<213> Mus musculus
<400> 1908
Met Glu Leu Tyr Asn Leu Thr Ser Asn Leu Glu Phe Leu Leu Gly
                                   10
Leu Ser Glu Asp Pro Glu Leu Gln Pro Val Leu Phe Ala Leu Phe Leu
                                25
Leu Ile Tyr Leu Leu Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala
```

```
35
                           40
                                               45
Ile Ser Cys Asp Ser His Leu His Ser Pro Met Tyr Phe Phe Leu Tyr
                       55
Asn Leu Ser Leu Ser Asp Met Gly Phe Ser Ser Thr Thr Ile Pro Lys
Met Leu Ile Asn Leu His Ala His Asn Arg Thr Ile Thr Tyr Ala Glu
                                    90
                8.5
Cys Leu Thr Gln Val Ser Phe Phe Phe Leu Phe Gly Cys Met Asp Ser
                               105
Val Leu Leu Ala Val Met Ala Tyr Asp Arg Trp Val Ala Ile Cys His
                           120
Pro Leu His Tyr Gln Val Ile Leu Asn Pro Arg Leu Cys Arg Tyr Leu
                       135
Val Val Met Ser Phe Cys Ile Ser Leu Ile Asp Ser Gln Val His Cys
                   150
                                       155
Phe Met Val Ser Gln Leu Lys Phe Cys Thr Asn Ile Lys Ile Pro His
               165
                                   170
Phe Phe Cys Asp Val Pro Glu Leu Leu Lys Leu Ala Cys Ser Asp Thr
           180
                                185
Ser Ile Asn Ser Ile Val Ile Phe Leu Val Ser Ile Ile Val Gly Phe
                            200
Leu Pro Ala Ser Gly Ile Phe Tyr Ser Tyr Tyr Lys Ile Ile Ser Ser
                       215
                                           220
Ile Val Arg Val Pro Ser Ser Gly Gly Lys Cys Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Cys Leu Phe Tyr Gly Thr Gly Leu
               245
                                    250
Gly Val Tyr Leu Ser Ser Ser Ile Ser Ser Ser Ser Lys Glu Ser Val
           260
                                265
Val Thr Ser Val Met Tyr Thr Met Val Val Pro Met Ile Asn Pro Phe
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Ile Lys Lys Ala Leu Gln Lys Ile
                       295
Phe Ser Gln Ile Ile Met Leu Pro Thr Tyr Ile Ile Pro
305
                    310
```

<210> 1909 <211> 312 <212> PRT

<213> Mus musculus

<400> 1909

 Met
 Glu
 Thr
 Val
 Asn
 Glu
 Thr
 Ile
 Ile
 Ser
 Glu
 Phe
 Ile
 Leu
 Glu
 Fro
 Ile
 Ile
 Phe
 Ile
 Ile
 Ile
 Phe
 Ile
 Ile
 Phe
 Leu
 Ile
 Phe
 Leu
 Ile
 Ile</th

```
Cys Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                           120
                                               125
Pro Leu Lys Tyr Thr Val Ile Met Asn Gln Tyr Val Cys Ala Met Leu
                       135
Leu Leu Phe Ser Leu Phe Leu Ser Ile Val His Ala Leu Phe His Thr
                    150
Leu Met Ile Leu Leu Ser Phe Cys Thr Glu Ile Glu Ile Pro His
               165
                                   170
Phe Phe Cys Glu Leu Ala Gln Ile Ile Arg Leu Ala Cys Ser Asp Asn
                               185
Phe Ile Asn Tyr Leu Leu Val Tyr Thr Val Ser Val Leu Phe Phe Gly
                           200
                                                205
Val Pro Val Phe Gly Ile Ile Leu Ser Tyr Ile His Ile Ile Ser Ser
                       215
                                           220
Val Leu Lys Met Ser Ser Leu Gly Gly Lys Tyr Lys Ala Phe Ser Thr
                   230
                                       235
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Gly Phe
                245
                                   250
Gly Val His Ile Ser Ser Ala Phe Thr Asp Ser Pro Lys Lys Thr Val
                                265
Val Ala Ser Val Met Tyr Thr Ile Ile Thr Gln Met Leu Asn Pro Phe
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Glu Met Lys Lys Ala Phe Arg Lys Ile
                      295
Thr Ser Lys Ile Pro Phe Leu Leu
                    310
```

<211> 309

<212> PRT

<213> Mus musculus

<400> 1910

Met Glu Pro Tyr Asn Ser Thr Gly Thr Leu Glu Phe Ile Leu Leu Gly 1.0 Leu Ser Glu Asp Pro Glu Leu Gln Phe Ile Leu Phe Ala Leu Phe Leu 25 Leu Ile Tyr Leu Leu Thr Val Leu Gly Asn Val Leu Ile Ile Leu Ala 40 Ile Ser Cys Asp Ser His Leu His Ser Pro Met Tyr Phe Phe Leu Tyr 55 Asn Leu Ser Leu Ala Asp Met Gly Phe Ser Ser Thr Thr Ile Pro Lys 70 75 Met Leu Ile Asn Leu His Ala His Asn Arg Ser Thr Thr Tyr Ala Glu 90 Cys Leu Thr Gln Val Ser Phe Phe Ile Leu Phe Gly Cys Met Asp Ser 100 105 Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Trp Val Ala Ile Cys His 120 Pro Leu His Tyr Gln Val Ile Leu Asn Pro Cys Arg Cys Arg Tyr Leu 135 Val Val Met Ser Phe Cys Ile Ser Leu Ile Asp Ser Gln Val His Cys 150 155 Phe Met Val Ser Gln Leu Thr Phe Cys Thr Asn Ile Glu Ile Pro His 170 Phe Phe Cys Asp Val Pro Glu Leu Val Lys Leu Ala Cys Ser Asn Thr

```
180
                               185
Thr Ile Asn Asp Ile Ala Met Phe Leu Ser Ser Ile Ile Thr Gly Phe
                            200
Leu Pro Ala Ser Gly Ile Phe Tyr Ser Tyr Tyr Lys Ile Thr Ser Ser
                        215
Ile Phe Arg Val Pro Ser Leu Leu Gly Lys Tyr Lys Ala Phe Ser Thr
                    230
                                        235
Cys Gly Ser His Leu Ser Val Val Cys Leu Phe Tyr Gly Thr Gly Ile
               245
                                   250
Gly Val Tyr Leu Ser Ser Thr Val Ser Ser Ser Ser Lys Glu Ser Met
            260
                                265
Val Ala Ser Val Met Tyr Thr Met Val Val Pro Met Met Asn Pro Phe
                           280
Ile Tyr Ser Leu Arg Asn Arg Asp Ile Lys Lys Ala Leu Trp Lys Ile
                        295
Val Cys Lys Ile Thr
```

<210> 1911 <211> 312 <212> PRT <213> Mus musculus

<400> 1911

Met Glu Pro Gly Asn Gln Thr Gly Thr Ser Tyr Phe Ile Leu Met Arg 10 Leu Asn Tyr Asp Pro Thr Val Glu Pro Leu Ile Phe Gly Phe Phe Met 20 25 Phe Thr Tyr Leu Val Thr Ile Val Gly Asn Leu Leu Ile Ile Ile Ala 40 Val Ser Ser Asp Ser His Leu Gln Thr Pro Met Tyr Leu Phe Leu Ser 55 60 Lys Leu Ser Phe Thr Asp Ile Cys Leu Ser Thr Thr Thr Val Pro Asn Met Leu Lys Asn Ile His Thr Gln Asp His Ser Ile Ser Tyr Thr Gly 8.5 90 Cys Leu Thr Gln Ala Cys Phe Val Leu Ser Phe Ala Val Leu Glu Ser 105 Ser Val Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys His 120 Pro Leu Asn Tyr Thr Val Ile Met Asn Pro Gln Phe Cys Gly Leu Leu 135 140 Ile Leu Leu Ser Leu Ile Ile Ser Thr Ala Asn Ser Leu Leu Gln Cys 150 155 Leu Met Ile Leu Arg Leu Ser Phe Cys Thr Asn Asn Glu Leu Pro Leu 165 170 Phe Phe Cys Glu Leu Ala Gln Val Ile Lys Leu Ala Cys Ser Asp Thr 180 185 Leu Ile Asn Tyr Ile Leu Ile Tyr Leu Ala Thr Phe Ile Phe Gly Gly 200 Ile Pro Ile Ser Gly Ile Ile Phe Ser Tyr Thr Arg Ile Val Ser Ser 215 Ile Leu Lys Ile Ser Ser Leu Arg Gly Arg Tyr Lys Ala Phe Ser Thr 230 235 Cys Gly Ser His Phe Val Val Val Ser Leu Phe Tyr Gly Ala Ala Val 250

```
Gly Val Tyr Ile Cys Ser Ala Ile Thr Val Ser Pro Gln Ile Thr Thr
                               265
           260
Val Ser Tyr Met Met Tyr Thr Val Leu Pro Gln Met Leu Asn Pro Phe
                           280
Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Lys Ala Leu Gly Lys Leu
                        295
Ile Thr Lys Val Ser Cys Phe Leu
                    310
<210> 1912
<211> 312
<212> PRT
<213> Mus musculus
<400> 1912
Met Glu Pro Gln Asn Lys Thr Phe Val Leu Gln Phe Leu Leu Gly
                                    10
Phe Thr Asp Asp Ala Glu Leu Gln Cys Leu Ile Phe Ser Leu Phe Leu
Phe Ile Tyr Leu Val Thr Ile Leu Gly Asn Leu Leu Ile Ile Leu Cys
                            40
Ile Ser Ser Glu Ser His Leu Gln Thr Pro Met Tyr Phe Phe Leu Ser
                       55
Asn Leu Ser Phe Asn Asp Ile Gly Leu Ser Thr Ala Thr Val Ile Lys
                                        75
                   70
Met Leu Val Asn Ile Gln Ala Asn Asp Gln Ser Ile Thr Tyr Thr Asp
                                   90
               85
Cys Leu Thr Gln Leu Phe Phe Val Leu Ala Phe Ala Tyr Phe Glu Asn
           100
                               105
Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys His
                           120
Pro Leu Arg Tyr Asn Ile Ile Met Asn Pro Asn Leu Cys Val Leu Leu
                       135
                                           140
Ser Leu Asn Ser Leu Phe Ile Ser Val Met Asp Ser Leu Ile His Thr
                   150
                                        155
Leu Met Val Gln Arg Leu Ser Phe Cys Thr Asp Leu Glu Ile Pro His
               165
                                  170
Phe Phe Cys Glu Leu Asp Gln Val Ile Lys Leu Ser Cys Ser Asp Thr
           180
                                185
Arg Ile Asp Asn Ile Val Leu Phe Val Ala Thr Cys Val Phe Gly Gly
       195
                            200
Val Pro Leu Cys Gly Ile Ile Tyr Ser Tyr Tyr His Ile Met Ser Thr
                       215
                                           220
Ile Leu Lys Ile Thr Ser Leu Glu Gly Lys Tyr Lys Ala Phe Ser Thr
                   230
                                        235
```

Cys Gly Thr His Leu Ser Val Val Ser Leu Phe Tyr Gly Ala Gly Ser

Met Val Tyr Ile Ser Ser Ala Ile Ser Ala Ser Pro Gly Lys Ser Ala 265

Val Ala Ser Val Met Tyr Ser Val Leu Pro Gln Met Met Asn Pro Phe 280

Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Val Ala Ile Arg Asn Leu

295

310

245

Phe Ser Arg Thr Ile Ser Leu Glu

305

250

270

285

300

```
<211> 315
<212> PRT
<213> Mus musculus
<400> 1913
Met Asn Asn Met Glu Lys Arg Asn Gln Thr Thr Phe Pro Gly Phe Leu
                                   10
Leu Leu Gly Leu Thr Glu Asp Pro Lys Leu Gln Pro Val Phe Val Ser
                                25
Leu Phe Phe Ser Ile Tyr Leu Ile Thr Ile Leu Gly Asn Leu Leu Ile
                           40
Ile Leu Ile Ser Ile Ser Asp Ala His Leu His Thr Pro Met Tyr Leu
                       55
                                            60
Phe Leu Ser Asn Leu Ser Leu Asn Asp Ile Cys Leu Ser Thr Ser Thr
                    70
                                        75
Ile Pro Lys Met Leu Val Asn Ile Lys Glu Asn Ser Gln Ser Ile Thr
                                    90
Tyr Lys Gly Cys Leu Thr Gln Met Ser Phe Val Leu Ile Phe Cys Gly
           100
                                105
Met Glu Asn Cys Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Ile Ala
                           120
                                               125
Ile Cys His Pro Leu Arg Tyr Thr Val Ile Met Glu Pro Cys Phe Cys
                      135
                                           140
Val Leu Leu Ile Leu Leu Ser Leu Leu Ile Ser Val Val Asp Thr Leu
                  150
                                        155
Met His Ser Leu Met Val Leu Arg Leu Ser Phe Cys Thr His Leu Glu
                                   170
               165
Ile Ser Asn Phe Ile Cys Glu Leu Pro Gln Ile Leu Lys Leu Ala Cys
           180
                               185
Ser Asp Thr Leu Ile Asp Asn Ile Leu Ile Tyr Leu Ser Ala Cys Ile
                            200
Phe Thr Gly Ile Pro Ile Ser Gly Ile Val Phe Ser Tyr Val His Ile
                        215
Ile Ser Ser Ile Leu Arg Met Ser Ser Leu Glu Gly Lys His Lys Ala
                   230
                                        235
Phe Thr Thr Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly
                                    250
Thr Ala Phe Gly Val Tyr Ile Thr Ser Ile Ile Met Asp Ser Ser Arg
           260
                                265
Asn Thr Ala Val Ala Ser Val Met Tyr Ser Val Val Pro Gln Met Leu
                           280
                                               285
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Glu Ala Met
                       295
Gly Lys Phe Phe Ser Arg Met Ala Ser Phe Leu
                    310
<210> 1914
<211> 315
<212> PRT
<213> Mus musculus
<400> 1914
Met Asn Asn Met Glu Lys Arg Asn Gln Thr Ala Phe Pro Gly Phe Leu
```

10

<210> 1913

```
Leu Leu Gly Leu Thr Glu Asp Pro Lys Leu Gln Pro Val Leu Val Ser
                                25
Leu Phe Phe Ser Ile Tyr Leu Val Thr Ile Phe Gly Asn Met Leu Ile
Val Leu Ile Ser Ile Ser Asp Ser His Leu His Thr Pro Met Tyr Leu
                        55
Leu Leu Ser Asn Leu Ser Leu Asn Asp Ile Cys Leu Ser Thr Ser Thr
                   70
                                        75
Ile Pro Lys Met Leu Val Asn Ile Gln Glu Asn Ile Gln Ser Ile Thr
Tyr Lys Gly Cys Leu Thr Gln Met Asn Phe Val Leu Ile Phe Gly Gly
                                105
           100
Met Glu Asn Cys Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala
       115
                           120
                                                125
Ile Cys His Pro Leu Arg Tyr Thr Val Ile Met Glu Pro Cys Phe Cys
   130
                       135
                                           140
Ile Leu Leu Ile Leu Leu Ser Leu Leu Ile Ser Ile Val Asp Ser Leu
                   150
                                        155
Met His Ser Leu Met Val Leu Arg Leu Pro Phe Cys Thr His Leu Glu
               165
                                    170
Ile Pro Ser Phe Phe Cys Glu Leu Pro Lys Met Leu Lys Leu Ala Cys
           180
                                185
Ser Asp Thr Leu Ile Asp Asn Ile Leu Ile Tyr Ile Ser Ser Cys Ile
                           200
Phe Ala Gly Ile Pro Leu Ser Gly Ile Val Phe Ser Tyr Ile His Ile
                       215
                                            220
Met Ser Ser Ile Leu Arg Met Ser Ser Glu Gly Lys His Lys Ala
                   230
                                        235
Phe Thr Thr Cys Gly Ser His Leu Ser Val Val Phe Leu Phe Tyr Gly
               245
                                    250
Thr Gly Phe Gly Val Tyr Ile Thr Ser Ile Ile Met Asp Ser Ser Arg
                                265
Lys Thr Ala Val Ala Ser Val Met Tyr Ser Val Val Pro Gln Met Leu
                            280
Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Met Lys Asp Thr Met
                        295
Arg Lys Phe Phe Ser Arg Ile Ala Ser Val Leu
                   310
```

```
<210> 1915
```

<400> 1915

 Met Glu Val Asp Ser Asn Ser Ser Ser Gly Ser Phe Ile Leu Met Gly 1
 5
 5
 10
 15
 15

 Val Ser Asp His Pro His Leu Glu Ile Ile Phe Phe Phe Ala Val Ile Leu 20
 20
 25
 30
 30

 Ala Ser Tyr Leu Leu Thr Leu Val Gly Asn Leu Thr Ile Ile Leu Leu 35
 40
 45
 45

 Ser Arg Leu Asp Ala Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser 50
 55
 60

 Asn Leu Ser Ser Leu Asp Leu Ala Phe Thr Thr Ser Ser Val Pro Gln 65
 70
 75
 80

 Met Leu Lys Asn Leu Trp Gly Pro Asp Lys Thr Ile Ser Tyr Gly Gly

<211> 312

<212> PRT

<213> Mus musculus

```
8.5
                                   90
Cys Val Thr Gln Leu Tyr Val Phe Leu Trp Leu Gly Ala Thr Glu Cys
                               105
Ile Leu Leu Val Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Arg
                           120
Pro Leu His Tyr Met Thr Val Met Asn Pro Arg Leu Cys Trp Gly Leu
                       135
                                           140
Ala Ala Ile Ser Trp Leu Gly Gly Leu Gly Asn Ser Val Ile Gln Ser
                   150
                                       155
Thr Phe Thr Leu Gln Leu Pro Phe Cys Gly His Arg Lys Val Asp Asn
               165
                                   170
Phe Leu Cys Glu Val Pro Ala Met Ile Lys Leu Ala Cys Gly Asp Thr
                               185
                                                   190
Ser Leu Asn Glu Ala Val Leu Asn Gly Val Cys Thr Phe Phe Thr Val
                           200
                                               205
Val Pro Val Ser Val Ile Leu Val Ser Tyr Cys Phe Ile Ala Gln Ala
                       215
Val Met Lys Ile Arg Ser Val Glu Gly Arg Arg Lys Ala Phe Asn Thr
                    230
                                        235
Cys Val Ser His Leu Val Val Phe Leu Phe Tyr Gly Ser Ala Ile
                245
                                    250
Tyr Gly Tyr Leu Leu Pro Ala Lys Ser Ser Asn Gln Ser Gln Gly Lys
                               265
           260
Phe Ile Ser Leu Phe Tyr Ser Val Val Thr Pro Met Val Asn Pro Leu
                           280
Ile Tyr Thr Leu Arg Asn Lys Glu Val Lys Gly Ala Leu Gly Arg Leu
                       295
Leu Gly Lys Gly Arg Gly Ala Ser
                    310
```

<211> 307

<212> PRT

<213> Mus musculus

<400> 1916

Met Ala Pro Val Asn Gln Ser Ala Ile Thr Met Phe Ile Leu Gln Asn Phe Val Asp Asp Pro Trp Ile Gln Asp Val Leu Phe Cys Leu Leu Phe 2.0 25 Ala Leu Phe Met Ala Ala Ile Ala Gly Asn Gly Leu Ile Ile Ala Thr 40 45 Ile His Ser Ser Pro Asn Leu His Thr Pro Met Tyr Phe Phe Leu Val 55 60 Asn Leu Ala Leu Met Asp Met Ile Cys Thr Val Thr Val Leu Pro Lys 75 Val Leu Gln Ser Leu Val Ala Glu Asn Ser Ile Ser Tyr Gly Gly Cys 90 Leu Ile Gln Met Phe Val Phe Ser Trp Val Leu Gly Ser Glu Leu Leu 105 100 Leu Phe Ser Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Arg Pro 120 Leu His Tyr Gly Thr Leu Met Ser Gly Arg Val Cys Val Ala Leu Ala 135 140 Thr Phe Val Trp Phe Ile Gly Ala Leu Asn Ser Leu Val Leu Thr Cys 155

Leu Val Leu Pro Leu Ser Phe Cys Gly Ser Asn Leu Ile Ala His Phe 170 165 Phe Cys Glu Ile Pro Ser Val Leu Ile Leu Ser Cys Ser Pro Thr Phe 185 Ile Asn Asn Val Met Thr Val Ile Ala Asp Met Phe Leu Thr Gly Leu 200 Asn Phe Leu Leu Thr Met Thr Ser Tyr Val Phe Ile Ile Ser Ser Ile 215 Leu Arg Ile Arg Ser Ala Glu Gly Lys Lys Arg Ala Phe Ser Thr Cys 230 235 Ser Ala His Leu Val Val Val Thr Leu Tyr Tyr Ser Thr Ala Leu Tyr 250 245 Thr Tyr Val Arg Pro Ala Leu Gly Thr Ala Gly Leu Leu Asp Lys Val 265 Ile Ala Ile Pro Tyr Thr Thr Val Thr Pro Ser Leu Asn Pro Leu Ile 280 285 Tyr Thr Leu Arg Asn Lys Glu Phe Lys Thr Ser Phe Lys Lys Leu Leu 295 Phe Pro Arg 305

<210> 1917 <211> 307

<212> PRT

<213> Mus musculus

<400> 1917

Met Ala Leu Val Asn Gln Ser Val Val Thr Met Phe Ile Leu Gln Arg 10 Phe Val Asp Asp Pro Trp Ile Gln Asp Val Leu Phe Cys Leu Phe Phe 25 Ala Leu Phe Met Ala Ala Ile Ala Gly Asn Gly Leu Ile Ile Ala Thr Ile His Ser Ser Pro Asn Leu His Thr Pro Met Tyr Phe Phe Leu Val Asn Leu Ser Leu Met Asp Val Ile Cys Thr Val Thr Val Leu Pro Lys 70 7.5 Val Leu Gln Ser Leu Val Ala Glu Asn Ser Ile Ser Tyr Gly Gly Cys Leu Thr Gln Met Phe Val Phe Ser Trp Val Leu Gly Ser Glu Leu Leu 105 Leu Phe Ser Ala Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys Arg Pro 115 120 125 Leu His Tyr Gly Thr Leu Met Ser Gly Lys Val Cys Val Ala Leu Ala 135 Thr Phe Val Trp Phe Thr Gly Ala Leu Asn Ser Leu Val Leu Thr Cys 150 155 Leu Met Leu Pro Leu Ser Phe Cys Gly Pro Asn Leu Ile Thr His Phe 165 170 Phe Cys Glu Ile Pro Ser Val Leu Ile Leu Ser Cys Ser Pro Thr Phe 185 Ile Asn Asp Ile Met Thr Val Ile Thr Asp Met Phe Leu Thr Gly Leu 200 Asn Phe Leu Leu Thr Met Thr Ser Tyr Val Phe Ile Ile Ala Ser Ile 215 Leu Arg Ile Arg Ser Ala Glu Gly Lys Lys Arg Ala Phe Ser Thr Cys

225 230 235 Ser Ala His Leu Val Val Thr Leu Tyr Tyr Ser Thr Val Leu Tyr 245 250 Thr Tyr Val Arg Pro Ala Leu Gly Thr Ala Gly Phe Leu Asp Lys Leu 260 265 Ile Ala Val Leu Tyr Thr Thr Val Thr Pro Ser Leu Asn Pro Leu Ile 280 Tyr Thr Leu Arg Asn Lys Glu Phe Lys Ile Ser Phe Lys Lys Leu Leu 295 Phe Pro His 305 <210> 1918 <211> 317 <212> PRT <213> Mus musculus <400> 1918 Met Ser Ser Lys Tyr Leu Met Ala Trp Ser Thr Gly Gln Asn Leu Ser Thr Pro Gly Pro Phe Ile Leu Leu Gly Phe Pro Gly Pro Arg Ser Met 25 Arg Ile Gly Leu Phe Leu Leu Phe Leu Val Met Tyr Leu Leu Thr Val Ala Gly Asn Leu Ala Ile Ile Ser Leu Val Gly Ala His Arg Cys Leu 55 Gln Thr Pro Met Tyr Phe Phe Leu Cys Asn Leu Ser Phe Leu Glu Ile 75 Trp Phe Thr Thr Ala Cys Val Pro Lys Thr Leu Ala Thr Phe Ala Pro 85 90 Arg Gly Gly Ala Ile Ser Leu Ala Gly Cys Ala Thr Gln Met Tyr Phe 105 Val Phe Ser Leu Gly Cys Thr Glu Tyr Phe Leu Leu Ala Val Met Ala 120 Tyr Asp Arg Tyr Leu Ala Ile Cys Leu Pro Leu Arg Tyr Gly Gly Ile 135 140 Met Thr Pro Gly Leu Ala Thr Arg Leu Ala Leu Gly Ser Trp Leu Cys 150 155 Gly Phe Ser Ala Ile Ile Val Pro Ala Ala Leu Ile Ala Arg Leu Ser 165 170 Phe Cys Gly Ser Arg Val Ile Asn His Phe Phe Cys Asp Ile Ser Pro 185 Trp Ile Val Leu Ser Cys Thr Asp Thr Gln Val Val Glu Leu Val Ser 200 205 Phe Gly Ile Ala Phe Cys Val Ile Leu Gly Ser Cys Gly Ile Thr Leu 215 Val Ser Tyr Ala Tyr Ile Ile Thr Thr Ile Ile Lys Ile Pro Ser Ala 230 235 Gln Gly Arg His Arg Ala Phe Ser Thr Cys Ser Ser His Leu Thr Val 245 250 Val Leu Ile Trp Tyr Gly Ser Thr Ile Phe Leu His Val Arg Thr Ser 265 Val Glu Ser Ser Leu Asp Leu Thr Lys Ala Val Thr Val Leu Asn Thr 280 285

Ile Val Thr Pro Val Leu Asn Pro Phe Ile Tyr Thr Leu Arg Asn Lys

. 295

```
<210> 1919
<211> 313
<212> PRT
<213> Mus musculus
<400> 1919
Met Ser Lys Gly Arg Glu Asn Glu Thr Gly Val Ser Glu Phe Leu Leu
                                    10
Leu Gly Ile Thr Asn Asp Pro Gln Gln Gln Ile Leu Phe Trp Ala
           20
                                25
Phe Leu Cys Met Tyr Leu Val Thr Val Ala Gly Asn Thr Leu Ile Phe
                            40
Leu Ala Ile Ile Ser Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe
                        55
Leu Ala Asn Leu Ser Phe Val Asp Val Cys Phe Thr Thr Asn Leu Ile
Pro Arg Leu Leu Ala Gly His Val Ala Gly Thr Arg Thr Ile Ser Tyr
                                    90
                85
Val His Cys Leu Thr Gln Thr Tyr Phe Leu Ile Ser Phe Ala Asn Val
                                105
Asp Thr Phe Leu Leu Ala Ala Met Ala Leu Asp Arg Phe Val Ala Ile
                           120
                                                125
Cys Tyr Pro Leu Gln Tyr His Thr Ile Ile Thr Pro Gln Leu Cys Val
                       135
                                            140
Gly Leu Ala Ala Val Val Trp Met Cys Ser Ala Leu Ile Ser Leu Met
                   150
                                       155
His Thr Leu Leu Met Ser Arg Leu Ser Phe Cys Ser Ser Ile Pro Glu
                                    170
Ile Ser His Phe Tyr Cys Asp Ala Tyr Leu Leu Met Lys Leu Ala Cys
                                185
Ser Asp Thr Arg Val Asn Gln Leu Val Phe Leu Gly Ala Val Val Leu
                            200
                                                205
Phe Val Ala Pro Cys Ile Leu Ile Val Val Ser Tyr Val Arg Ile Thr
                        215
Met Val Val Leu Gln Ile Pro Ser Ala Lys Gly Arg His Lys Thr Phe
                    230
                                        235
Ser Thr Cys Ser Ser His Leu Ser Val Val Thr Leu Phe Tyr Gly Thr
                245
                                    250
Val Leu Gly Ile Tyr Ile Arg Pro Pro Asp Ser Phe Ser Thr Gln Asp
            260
                                265
Thr Val Ala Thr Ile Met Tyr Thr Val Val Thr Pro Met Leu Asn Pro
                            280
Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Glu Ser Val Thr Arg
                        295
                                            300
Leu Leu Asn Arg Gly Ser Lys Ser Ser
305
                    310
```

<210> 1920

<211> 313

<212> PRT

<213> Mus musculus

```
<400> 1920
Met Ser Lys Gly Arg Glu Asn Glu Thr Gly Val Ser Glu Phe Leu Leu
                                    10
Leu Gly Ile Thr Asn Asp Pro Gln Gln Gln Ile Leu Phe Trp Ala
Phe Leu Cys Met Tyr Leu Val Thr Val Ala Gly Asn Thr Leu Ile Phe
Leu Ala Ile Ile Ser Asp Pro Cys Leu His Thr Pro Met Tyr Phe Phe
                        55
Leu Ala Asn Leu Ser Phe Val Asp Val Cys Phe Thr Thr Asn Leu Ile
                   70
                                        7.5
Pro Arg Leu Leu Ala Gly His Val Ala Gly Thr Arg Thr Ile Ser Tyr
               85
                                   90
Ala Gln Cys Leu Thr Gln Met Phe Phe Met Ile Ser Phe Ala His Val
           100
                               105
Asp Thr Leu Leu Leu Ala Ala Met Ala Leu Asp Arg Phe Val Ala Ile
                           120
Cys Tyr Pro Leu Gln Tyr His Thr Ile Ile Thr Pro Gln Leu Cys Val
                        135
Gly Leu Ala Ala Val Val Trp Met Cys Ser Ala Leu Ile Ser Leu Met
                    150
                                        155
His Thr Leu Leu Met Ser Arg Leu Arg Phe Cys Ser Ser Ile Pro Glu
               165
                                   170
Ile Ser His Phe Tyr Cys Asp Ala Tyr Leu Leu Met Lys Leu Ala Cys
                               185
Ser Asp Thr Arg Val Asn Gln Leu Ala Ser Leu Gly Thr Leu Phe Leu
                           200
Phe Val Ala Pro Cys Ile Leu Ile Val Val Ser Tyr Val Arg Ile Thr
                    . 215
                                           220
Met Ala Val Phe Gln Ile Pro Ser Ala Lys Gly Arg His Lys Ala Phe
                   230
                                       235
Ser Thr Cys Ser Ser His Leu Ser Val Val Ile Leu Phe Tyr Gly Thr
                245
                                    250
Ile Leu Gly Ile Tyr Ile Arg Pro Pro Gly Ser Phe Ser Ile Gln Val
                                265
Ser Val Ala Thr Ile Met Tyr Thr Val Phe Thr Pro Met Leu Asn Pro
                           280
                                               285
Phe Ile Tyr Ser Leu Arg Asn Lys Asp Met Lys Glu Thr Val Thr Arg
                       295
Ile Leu Asn Arg Asp Ser Lys Pro Ser
305
                   310
<210> 1921
<211> 305
<212> PRT
<213> Mus musculus
<400> 1921
Met Asn Cys Ser Gln Ala Pro Thr Leu Ile Leu Leu Gly Leu Ser Ser
                                   10
Asp Ala Glu Lys Trp Gln Pro Leu Phe Ser Ile Phe Leu Val Ile Tyr
                                25
Leu Leu Gly Leu Leu Gly Asn Leu Leu Leu Leu Ala Ile Gly Thr
                           40
Asp Val His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Gln Leu Ser
```

55

```
Phe Val Asp Leu Cys Phe Ile Thr Thr Thr Ala Pro Lys Met Leu Glu
                   70
                                        7.5
Ala Leu Trp Thr Gly Asp Gly Ser Ile Ser Phe Ser Gly Cys Leu Thr
                85
                                    90
Gln Leu Tyr Phe Phe Ala Val Phe Ala Asp Met Asp Asn Leu Leu Leu
                                105
Ala Val Met Ala Ile Asp Arg Tyr Ala Ala Ile Cys His Pro Leu Arg
                           120
Tyr Ser Ala Leu Met Thr Pro Phe Arg Cys Gly Val Leu Val Ser Gly
                       135
Ser Trp Gly Val Thr Asn Cys Val Ser Leu Thr His Thr Leu Leu Leu
                   150
                                        155
Ser Lys Leu Tyr Phe His Thr Asn Gln Glu Ile Pro His Phe Phe Cys
                                    170
               165
Glu Phe Gly Pro Leu Leu Leu Ser Cys Ser Asp Thr His Leu Asn
                               185
Lys Ile Leu Val Ile Ile Leu Val Gly Ile Leu Gly Ile Ser Ala Val
                           200
Leu Cys Ile Val Ser Ser Tyr Gly Cys Ile Phe Tyr Ala Val Ala Lys
                        215
                                            220
Val Pro Ser Ala Gln Gly Lys Arg Lys Ala Leu Ser Thr Cys Ser Ser
                   230
                                        235
His Leu Ser Val Val Leu Leu Phe Tyr Ser Thr Val Phe Ala Thr Tyr
               245
                                    250
Leu Lys Pro Pro Ser Ser Ser Arg Ser Ser Glu Glu Val Val Ala Ala
           260
                                265
Val Met Tyr Ser Leu Val Thr Pro Thr Leu Asn Pro Phe Ile Tyr Ser
       275
                           280
                                               285
Leu Arg Asn Lys Asp Val Lys Ser Ser Leu Arg Arg Ile Leu Asn Met
                        295
                                            300
Glu
305
```

<211> 313

<212> PRT

<213> Mus musculus

<400> 1922

Met Gly Ile Leu Ser Thr Gly Asn Gln Thr Val Thr Glu Phe Val Leu 10 Leu Gly Phe His Glu Val Pro Gly Leu His Leu Leu Phe Phe Ser Val 20 25 Phe Thr Ile Leu Tyr Ala Ser Ile Ile Thr Gly Asn Met Leu Ile Ala Val Val Val Ser Ser Gln Arg Leu His Thr Pro Met Tyr Phe Phe 55 Leu Val Asn Leu Ser Phe Ile Glu Ile Val Tyr Thr Ser Thr Val Val 70 7.5 Pro Lys Met Leu Glu Gly Phe Leu Gln Glu Ala Thr Ile Ser Val Ala 90 Gly Cys Leu Leu Gln Phe Phe Val Phe Gly Ser Leu Ala Thr Asp Glu 105 100 Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Leu Ala Ile Cys 120 His Pro Leu Arg Tyr Pro His Leu Met Gly Pro Gln Trp Cys Leu Gly

```
130
                       135
                                            140
Leu Val Leu Thr Val Trp Leu Ser Gly Phe Met Val Asp Gly Leu Val
                   150
                                       155
Val Ala Leu Met Ala Gln Leu Arg Phe Cys Gly Pro Asn Leu Val Asp
                165
                                    170
His Phe Tyr Cys Asp Phe Ser Pro Leu Met Val Leu Ala Cys Ser Asp
           180
                                185
                                                   190
Thr Gln Val Ala Gln Val Thr Thr Phe Val Leu Ser Val Val Phe Leu
                           200
Thr Val Pro Phe Gly Leu Val Leu Ile Ser Tyr Ala Gln Ile Val Val
                       215
                                           220
Thr Val Leu Arg Val Pro Ser Gly Thr Arg Arg Thr Lys Ala Phe Ser
                   230
                                       235
Thr Cys Ser Ser His Leu Ala Val Val Ser Thr Phe Tyr Gly Thr Leu
               245
                                   250
Met Val Leu Tyr Ile Val Pro Ser Ala Val His Ser Gln Leu Leu Ser
                                265
Lys Val Ile Ala Leu Leu Tyr Thr Val Val Thr Pro Ile Phe Asn Pro
                            280
Val Ile Tyr Thr Leu Arg Asn Gln Glu Val Gln Gln Ala Leu Arg Arg
                       295
Leu Leu Tyr Cys Lys Pro Thr Glu Met
```

<210> 1923 <211> 312 <212> PRT

<213> Mus musculus

<400> 1923

Met Gly Thr Asn Ser Ser Leu Val Thr Glu Phe Val Leu Val Gly Phe 10 Ser Arg Leu Val His Leu Gln Gly Ile Leu Phe Ser Leu Phe Leu Thr 25 Val Tyr Leu Leu Thr Val Ala Gly Asn Leu Leu Ile Val Ala Leu Val 40 Ser Thr Asp Ala Ala Leu Gln Ser Pro Met Tyr Phe Phe Leu Arg Ile 55 Leu Ser Ala Leu Glu Ile Cys Tyr Thr Ser Val Thr Val Pro Leu Leu 70 75 Leu His His Leu Leu Thr Gly Arg Arg His Ile Ser Arg Ser Gly Cys 85 90 Ala Leu Gln Met Phe Phe Phe Leu Phe Phe Gly Ala Thr Glu Cys Cys 105 Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Glu Pro 120 125 Leu Arg Tyr Gln Val Leu Leu Ser Arg Arg Val Cys Val Gln Leu Ala 135 140 Gly Ala Ala Trp Ser Cys Gly Ala Leu Val Gly Leu Gly His Thr Ser 150 155 Phe Ile Phe Ser Leu Pro Phe Cys Gly Pro Asn Ala Val Pro His Phe 165 170 Phe Cys Glu Ile Gln Pro Val Leu Gln Leu Val Cys Gly Asp Thr Ser 185 Leu Asn Glu Leu Gln Ile Ile Leu Ala Ala Ala Leu Ile Ile Leu Cys 200 205

```
Pro Phe Gly Leu Ile Leu Ser Ser Tyr Gly Arg Ile Leu Val Thr Ile
                      215
                                          220
Phe Arg Ile Pro Ser Ala Ala Gly Arg Arg Lys Ala Phe Ser Thr Cys
                   230
                                      235
Ser Ser His Leu Val Val Ser Leu Phe Tyr Gly Thr Ala Ile Phe
                                  250
Ile Tyr Ile Arg Pro Lys Ala Ser Tyr Asp Pro Thr Thr Asp Pro Leu
          260
                              265
Leu Ser Leu Phe Tyr Ala Val Ile Thr Pro Ile Leu Asn Pro Val Ile
                          280
Tyr Ser Leu Arg Asn Ala Asp Val Lys Ala Ala Leu Lys Arg Ser Ile
       295
                                          300
Gln Lys Met Gly Pro Ser Glu Ile
                   310
```

<210> 1924 <211> 310 <212> PRT <213> Mus musculus

<400> 1924

~4U()/ I:	744													
Met 1	Met	Asn	Cys	Ser 5	Gln	Ala	Pro	Gly	Phe 10	Ile	Leu	Leu	Gly	Leu 15	Ser
Ser	Asn	Ser	Glu 20	Lys	Trp	Gln	Pro	Leu 25	Phe	Ser	Ile	Phe	Leu 30	Val	Leu
Tyr	Leu	Leu 35	Gly		Leu	Gly	Asn 40	Leu	Leu	Leu	Leu	Leu 45	Ala	Ile	Gly
Thr	Asp 50	Val	His	Leu	His	Thr 55	Pro	Met	Tyr	Phe	Phe 60	Leu	Ser	Gln	Leu
Ser 65	Leu	Val	Asp	Leu	Cys 70	Phe	Ile	Thr	Thr	Thr 75	Ala	Pro	Lys	Met	Leu 80
Glu	Thr	Leu	Trp	Thr 85	Gly	Asp	Gly	Ser	Ile 90	Ser	Phe	Ser	Gly	Cys 95	Leu
Thr	Gln	Leu	Tyr 100	Phe	Phe	Ala	Val	Phe 105	Ala	Asp	Met	Asp	Asn 110	Leu	Leu
Leu	Ala	Val 115	Met	Ala	Ile	Asp	Arg 120	Tyr	Ala	Ala	Ile	Cys 125	His	Pro	Leu
Leu	Tyr 130	Pro	Leu	Leu	Met	Thr 135	Pro	Cys	Arg	Cys	Arg 140	Val	Leu	Val	Ser
Gly 145	Ser	Trp	Gly	Val	Ala 150	His	Cys	Val	Ser	Leu 155	Thr	His	Ile	Leu	Leu 160
Leu	Ser	Gln	Leu	Tyr 165	Phe	His	Thr	Asn	Gln 170	Glu	Ile	Pro	His	Phe 175	Phe
Cys	Asp	Phe	Gly 180	Pro	Leu	Leu	Leu	Leu 185	Ser	Cys	Ser	Asp	Ala 190	His	Leu
Asn	Glu	Ser 195	Leu	Met	Met	Ala	Leu 200	Ala	Gly	Val	Leu	Gly 205	Ile	Ser	Ala
Leu	Leu 210	Cys	Ile	Val	Ser	Ser 215	Tyr	Gly	Cys	Ile	Phe 220	Tyr	Ala	Val	Ala
Lys 225	Val	Pro	Ser	Ala	Gln 230	Gly	Lys	Arg	Lys	Ala 235	Leu	Ala	Thr	Cys	Ser 240
Ser	His	Leu	Ser	Val 245	Val	Leu	Leu	Phe	Tyr 250	Ser	Thr	Val	Phe	Ala 255	Thr
Tyr	Leu	Lys	Pro 260	Pro	Ser	Ser	Ser	Arg 265	Ser	Ser	Gly	Glu	Val 270	Val	Ala
Ala	Val	Met	Tyr	Thr	Leu	Val	Thr	Pro	Thr	Leu	Asn	Pro	Phe	Ile	Tyr

275 280 285 Ser Leu Arg Asn Lys Asp Val Lys Ser Ser Leu Arg Arg Ile Leu Asn 295 Met Val Lys Ser Gln Asp 305 <210> 1925 <211> 309 <212> PRT <213> Mus musculus <400> 1925 Met Asn Cys Ser Lys Ala Pro Gly Phe Ile Leu Leu Gly Leu Ser Ser 10 Asp Pro Glu Lys Trp Gln Pro Leu Phe Asn Ile Phe Leu Cys Leu Tyr 25 Leu Leu Gly Leu Gly Asn Leu Leu Leu Leu Ala Ile Gly Thr Asp Val His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Gln Leu Ser 55 Leu Val Asp Leu Cys Phe Ile Thr Thr Ala Pro Lys Met Leu Glu Ala Leu Trp Thr Gly Asp Gly Ser Ile Ser Phe Ser Gly Cys Leu Thr 90 85 Gln Phe Tyr Phe Phe Ala Val Phe Ala Asp Met Asp Asn Leu Leu Leu 100 105 Ala Val Met Ala Ile Asp Arg Tyr Ala Ala Ile Cys His Pro Leu Phe 120 125 Tyr Pro Phe Leu Met Thr Pro Cys Arg Cys Glu Val Leu Ala Ser Gly 135 140 Ser Trp Gly Ile Ala His Cys Val Ser Leu Phe Tyr Thr Leu Leu Leu 150 155 Ser Gln Phe Tyr Tyr His Thr Asn Gln Gly Ile Pro His Phe Cys 165 170 Asp Ser Arg Pro Leu Leu Leu Ser Cys Ser Asp Thr His Leu Ser 180 185 Glu Gly Leu Met Met Ala Leu Ser Gly Val Leu Gly Met Ser Ser Val 200 205 Leu Cys Leu Val Ser Ser Tyr Gly Cys Ile Phe Tyr Ala Val Ala Arg 215 Val Pro Ser Ala Gln Gly Lys Arg Lys Ser Leu Ala Thr Cys Ser Ser 230 235 His Leu Ser Val Val Leu Leu Phe Tyr Ser Thr Val Phe Ala Thr Tyr 250 Leu Lys Pro Pro Ser Thr Ser His Ser Ser Ala Glu Val Val Ala Ala 260 265 Val Met Tyr Thr Leu Val Thr Pro Thr Leu Asn Pro Phe Ile Tyr Ser 280 Leu Arg Asn Lys Asp Val Lys Ser Ser Leu Arg Lys Ile Leu Asn Met 295 Asp Lys Phe Gln Gly 305

<210> 1926 <211> 309 <400> 1926 Met Asn Cys Ser Gln Ala Pro Thr Phe Ile Leu Leu Gly Leu Ser Ser Asp Ala Glu Lys Trp Gln Pro Leu Phe Ser Ile Phe Leu Val Leu Tyr 25 Leu Leu Gly Leu Leu Gly Asn Leu Leu Leu Leu Ala Ile Gly Thr 40 Asp Val His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Gln Leu Ser 55 Leu Val Asp Leu Cys Phe Ile Thr Thr Thr Ala Pro Lys Met Leu Glu 70 . 75 Ala Leu Trp Thr Gly Asp Gly Ser Ile Ser Phe Ser Gly Cys Leu Thr 85 90 Gln Leu Tyr Phe Phe Ala Val Phe Ala Asp Met Asp Asn Leu Leu Leu 105 Ala Val Met Ala Ile Asp Arg Tyr Ala Ala Ile Cys His Pro Leu Leu 120 Tyr Pro Leu Leu Met Thr Pro Cys Arg Cys Arg Val Leu Val Ser Gly 135 140 Ser Trp Gly Val Ala His Cys Val Ser Leu Thr His Thr Leu Leu Phe 150 155 Ser Lys Leu Tyr Phe His Asn Asn Gln Glu Ile Pro His Phe Cys 170 165 Asp Phe Gly Pro Leu Leu Leu Ser Cys Ser Asp Thr Tyr Leu Asn 185 180 190 Glu Ser Leu Met Met Ala Leu Ser Gly Leu Leu Ala Ile Ser Ala Phe 200 205 Leu Cys Ile Val Ser Ser Tyr Gly Cys Ile Phe Tyr Ala Val Ala Lys 215 Val Pro Ser Ala Gln Gly Lys Arg Lys Ala Leu Ala Thr Cys Ser Ser 230 235 His Leu Ser Val Val Leu Leu Phe Tyr Ser Thr Val Phe Ala Thr Tyr 250 245 Leu Lys Pro Pro Ser Ser Ser His Ser Ser Gln Glu Val Val Ala Ala 265 Val Met Tyr Thr Leu Val Thr Pro Thr Leu Asn Pro Phe Ile Tyr Ser 280 285 Leu Arg Asn Lys Asp Val Lys Ser Ser Leu Arg Arg Ile Leu Asn Met 295 Val Lys Ser Gln Asp 305 <210> 1927 <211> 310

<212> PRT

<213> Mus musculus

<400> 1927

Met Ser Gly Val Ser Glu Asn Gln Thr Trp Leu Thr Leu Val Gly 10 Phe Gly Lys Leu Lys His Leu Gly Phe Leu Pro Phe Ala Leu Phe Leu 25 Ala Ile Tyr Val Ala Thr Val Gly Gly Asn Ile Leu Ile Val Leu Ala

```
35
                           40
Val Ala Ser Ser Arg Thr Leu His Thr Pro Met Tyr Phe Phe Leu Cys
                       55
His Phe Ser Leu Leu Glu Ile Gly Tyr Thr Ser Asn Ile Val Pro Arg
Leu Leu Gln Ser Phe Leu Glu Gly Gly Asp Leu Ile Ser Leu Val Gly
               85
                                   90
Cys Leu Ala Gln Phe Tyr Val Phe Ala Ser Leu Ala Ala Glu Cys
                               105
Leu Met Leu Ser Ala Met Ser Tyr Asp Arg Tyr Leu Ala Ile Cys His
                           120
                                               125
Pro Leu His Tyr Pro Val Leu Met Ser Thr Trp Cys Cys Val Arg Leu
                       135
Ala Thr Gly Ala Trp Phe Ser Gly Phe Phe Phe Ser Ala Phe Thr Leu
                   150
                                       155
Ala Leu Ala Ala Pro Leu Ser Leu Cys Pro Gly Arg Arg Val Ile Asp
                                   170
His Tyr Phe Cys Asp Phe Ala Pro Val Val Gly Leu Phe Cys Gly Glu
           180
                               185
Val Trp Val Met Trp Gly Ala Gly Val Ser Ile Ser Gly Cys Leu Thr
       195
                           200
                                               205
Leu Ala Pro Phe Leu Leu Ile Val Ala Ser Tyr Val Phe Ile Leu Arg
                       215
Ala Val Leu Arg Ile Pro Ser Ser His Gly Arg Gln Lys Ala Phe Ser
                   230
                                       235
Thr Cys Ser Ser His Leu Ser Val Val Ala Val Phe Tyr Gly Thr Leu
               245
                                   250
Ile Val Val Tyr Val Ala Pro Thr Glu His Met Pro Ala Leu Leu Arg
           260
                               265
Lys Ala Phe Ser Val Phe Tyr Thr Val Leu Thr Pro Met Phe Asn Pro
                          280
Ile Ile Tyr Ser Leu Lys Asn Gln Glu Val Lys Trp Ala Leu Arg Arg
                       295
Leu Cys Arg Gln Leu Leu
305
<210> 1928
<211> 311
<212> PRT
<213> Mus musculus
```

```
Tyr Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Tyr Pro Leu
                           120
       115
                                               125
Arg Tyr Ser Ile Ile Met Ser His Arg Val Cys Ala Ile Leu Ala Thr
                       135
Gly Thr Ser Phe Phe Gly Cys Ile Gln Ala Thr Phe Leu Thr Thr Leu
                   150
                                        155
Thr Phe Gln Leu Pro Tyr Cys Gly Pro Asn Glu Val Asp Tyr Tyr Phe
                                    170
               165
Cys Asp Ile Pro Val Met Leu Lys Leu Ala Cys Ala Asp Thr Ser Ala
                               185
Leu Glu Met Val Gly Phe Ile Ser Val Gly Leu Met Pro Leu Ser Cys
                           200
                                                205
Phe Leu Leu Ile Leu Thr Ser Tyr Ser Cys Ile Val Cys Ser Ile Leu
                       215
                                            220
Gln Ile Arg Ser Ala Glu Gly Arg Arg Ala Phe Ser Thr Cys Ser
                   230
                                      235
Ala His Leu Thr Ala Ile Leu Leu Phe Tyr Met Pro Val Val Leu Ile
               245
                                   250
Tyr Leu Arg Pro Thr Pro Ser Pro Trp Leu Asp Ala Thr Val Gln Val
           260
                                265
Leu Asn Asn Leu Val Thr Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu
                            280
Arg Asn Lys Glu Val Lys Ala Ser Leu Trp Lys Val Leu Arg Lys Pro
                       295
                                           300
Ala Phe Ala Pro Glu Gln Leu
                    310
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1929

Met Ala Ala Gly Asn His Cys Thr Val Thr Glu Phe Phe Leu Val Gly Leu Ser Glu Lys Pro Glu Phe Gln Leu Pro Leu Phe Leu Leu Phe Leu 25 Gly Ile Tyr Leu Ile Thr Val Thr Gly Asn Val Gly Met Ile Thr Leu 40 Ile Gly Leu Ser Ser His Leu His Thr Pro Met Tyr Phe Phe Val Arg 55 Ser Leu Ser Phe Ile Asp Phe Cys Gln Ser Thr Val Val Ile Pro Lys 75 Met Leu Met Ser Phe Leu Thr Glu Lys Asn Ile Ile Ser Tyr Ser Gly 85 90 Cys Met Val Gln Leu Tyr Phe Phe Phe Ile Phe Gly Ile Ala Glu Cys 100 105 Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn 120 Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Ile Tyr Asn Ser Leu 135 140 Ile Ser Gly Ser Tyr Ile Phe Ala Val Val Cys Ser Ser Leu Ile Thr 155 Gly Phe Met Phe Arg Ile Gln Phe Cys Asn Leu Asp Val Ile Asn His 165 170 Tyr Phe Cys Asp Leu Leu Pro Leu Leu Asn Leu Ala Ser Ser Asn Ile

180 185 Tyr Ile Asn Glu Ile Leu Ile Leu Val Ile Ala Thr Leu Asn Val Phe 200 Ile Pro Val Met Thr Ile Ile Thr Ser Tyr Ile Phe Ile Ile Ala Thr 215 Ile Leu Tyr Ile His Ser Ser Glu Gly Lys Phe Lys Gly Phe Ser Thr 230 235 Cys Ser Thr His Ile Ser Ala Val Ala Ile Phe Tyr Gly Ser Gly Ala 250 245 Phe Thr Tyr Leu Gln Pro Ser Leu Leu Asn Ser Met Gly Gln Ala Lys 265 260 Val Ser Ser Val Phe Cys Thr Thr Val Val Pro Met Leu Asn Pro Phe 280 Ile Tyr Ser Leu Arg Asn Lys Asp Val Ser Phe Ala Leu Lys Lys Ile 295 Phe Glu Arg Lys Lys Phe Met

<210> 1930

<211> 319

<212> PRT

<213> Mus musculus

<400> 1930

Met Glu Asp Met Thr Ser Gly Asn Asn Cys Thr Val Ser Glu Phe Phe 10 Leu Ala Gly Leu Ser Glu Glu Pro Glu Leu Gln Leu Pro Leu Phe Leu 25 Leu Phe Thr Gly Ile Tyr Leu Ile Thr Val Val Gly Asn Leu Gly Met 40 Ile Thr Leu Ile Gly Ile Ser Ser His Leu His Thr Ala Met Tyr Phe 55 60 Phe Leu Ser Ser Leu Ser Phe Ile Asp Phe Cys Gln Ser Thr Val Val 70 75 Thr Pro Lys Met Leu Val Ser Phe Leu Thr Glu Lys Asn Ile Ile Ser 90 85 Tyr Leu Gly Cys Met Ala Gln Leu Tyr Phe Phe Ile Ile Phe Gly Ala 100 105 Ala Glu Cys Tyr Thr Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala 120 115 125 Ile Cys Asn Pro Leu Leu Tyr Thr Val Val Met Ser Tyr Gln Val Tyr 135 Ser Ser Leu Ile Ser Gly Val Tyr Ile Tyr Ala Val Phe Cys Ala Ser 150 155 Val His Thr Gly Val Leu Thr Arg Ile Gln Phe Cys Lys Leu Asp Val 170 Ile Asn His Tyr Phe Cys Asp Ile Leu Pro Leu Leu Lys Leu Ala Cys 180 185 Ser Asn Thr Tyr Ile Asp Glu Met Leu Ile Leu Phe Phe Gly Thr Leu 200 Asn Ile Phe Ala Pro Thr Leu Ile Ile Ile Thr Ser Tyr Ile Phe Ile 215 Ile Ala Ser Ile Phe His Ile Arg Ser Arg Glu Gly Arg Ser Lys Ala 230 235 Phe Ser Thr Cys Ser Ser His Ile Ser Ala Val Ala Ile Phe Tyr Gly 245 250

Ser Ala Ala Phe Met Tyr Leu Gln Pro Ser Arg Val Asn Ser Met Asp 260 265 Gln Gly Lys Val Ser Ser Val Phe Tyr Thr Thr Val Val Pro Met Leu 275 280 Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val Thr Val Ala Leu 295 Lys Lys Ile Leu Glu Arg Lys Asn Phe Met Trp Ser Glu Val Thr 310 315 <210> 1931 <211> 310

<212> PRT <213> Mus musculus

305

<400> 1931 Met Asp Asn Tyr Thr Leu Leu Asn Glu Phe Ile Leu Leu Gly Ile Pro Gln Thr Gln Gly Leu Glu Thr Leu Leu Phe Val Val Phe Leu Phe Ile 25 Tyr Phe Phe Thr Leu Leu Gly Asn Ser Leu Ile Phe Thr Ala Ile Ile Ser Ser Ser Thr Leu His Thr Pro Met Tyr Phe Phe Leu Gly Leu Leu 55 60 Ser Val Phe Asp Met Leu Phe Pro Ser Val Thr Cys Pro Lys Met Leu 70 75 Phe Tyr Leu Ser Val Arg Ser Pro Ala Ile Ser Tyr Lys Gly Cys Ala 85 90 Ala Gln Leu Phe Phe Tyr His Leu Leu Gly Ser Thr Glu Gly Cys Leu 100 105 110 Tyr Ser Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu 120 125 Arg Tyr Met Leu Ile Met Lys Pro Gly Val Cys Val Ser Leu Val Ile 135 Ile Ala Trp Leu Val Gly Cys Leu His Ala Thr Ile Leu Thr Ser Leu 150 155 Thr Phe Gln Leu Val Tyr Cys Ala Ser Asn Gln Val Asp Tyr Phe Phe 165 170 Cys Asp Leu Pro Ala Val Leu Pro Leu Ala Cys Thr Asp Ser Lys Leu 185 Ala Arg Lys Val Gly Ser Ile Asn Val Gly Phe Leu Ala Leu Met Leu 200 205 Leu Phe Ser Val Cys Val Ser Tyr Val His Ile Gly Val Ala Ile Leu 215 220 Arg Ile Arg Ser Ala Glu Gly Arg Gln Lys Ala Phe Ser Thr Cys Ser 230 235 Ala His Leu Thr Ala Ile Leu Cys Ala Tyr Gly Pro Val Ile Ile Ile 250 Tyr Leu Gln Arg Thr Pro Asn Pro Leu Leu Gly Ala Val Val Gln Ile 265 260 Leu Asn Asn Ile Val Ser Pro Met Leu Asn Ser Leu Ile Tyr Ser Leu 280 285 Arg Asn Lys Glu Val Lys Arg Ser Leu Arg Arg Val Phe Gln Asn Ile 295 Thr Phe His Gly Gln Lys

310

```
<211> 314
<212> PRT
<213> Mus musculus
<400> 1932
Met Thr Asn His Thr Met Val Thr Glu Phe Thr Leu Leu Gly Ile Pro
                                    10
Glu Thr Glu Gly Leu Glu Asn Ala Leu Leu Phe Leu Phe Ser Thr Met
                                25
Tyr Ala Cys Ala Leu Leu Gly Asn Phe Leu Ile Leu Thr Ala Ile Thr
Thr Ser Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Gly Asn Leu
                        55
                                            60
Ser Ile Phe Asp Leu Gly Phe Cys Ser Thr Thr Ala Pro Lys Met Leu
Ser Tyr Leu Ser Gly Trp Gly Gly Gly Ile Ser Phe Gln Gly Cys Val
                                    90
                85
Val Gln His Phe Phe Tyr His Cys Leu Gly Cys Thr Leu Cys Phe Leu
            100
                                105
Tyr Thr Val Met Ala Tyr Asp Arg Phe Val Ala Ile Cys Phe Pro Leu
                            120
                                               125
Arg Tyr Thr Ile Ile Met Asn His Arg Val Cys Cys Val Leu Ala Thr
                       135
                                           140
Gly Thr Trp Met Ser Gly Cys Val His Ala Thr Ile Leu Thr Ser Leu
                   150
                                        155
Thr Phe Gln Leu Pro Tyr Cys Gly Pro Ser Glu Val Ser Tyr Tyr Phe
                165
                                    170
                                                        175
Cys Asp Met Pro Ala Val Leu Leu Leu Ala Cys Glu Asp Ser Ser Leu
           180
                               185
Ala Gln Arg Val Gly Phe Thr Asn Val Gly Leu Leu Ser Leu Ile Cys
                            200
Phe Phe Leu Ile Ile Val Ser Tyr Thr Arg Ile Gly Ile Ser Ile Ser
                        215
                                            220
Lys Ile Arg Ser Thr Glu Gly Arg Gln Arg Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ala His Leu Thr Ala Ile Met Cys Val Tyr Gly Pro Val Ile Val Ile
               245
                                    250
Tyr Leu Gln Pro Asn Pro Ser Pro Leu Leu Ser Ala Ile Ile Gln Ile
           260
                                265
                                                    270
Leu His Asn Leu Val Thr Pro Thr Ile Asn Pro Leu Ile Tyr Ser Leu
                            280
                                               285
Arg Asn Lys Asp Val Lys Ala Ala Leu Arg His Val Phe Leu Lys Arg
                       295
                                            300
Cys Leu Ser Leu Glu Val Asn Glu Asn Ser
<210> 1933
<211> 314
<212> PRT
<213> Mus musculus
<400> 1933
Met Glu Glu Leu Asn His Thr Pro Val Ala Glu Phe Ile Leu Ala Gly
```

```
Leu Thr Glu Asn Pro Glu Leu Gln Leu Pro Leu Phe Leu Ile Phe Leu
                                25
Ser Val Tyr Leu Phe Thr Val Val Gly Asn Leu Gly Met Ile Val Leu
Ile Leu Ile Ser Ser Gln Leu His Thr Pro Met Tyr Tyr Leu Leu Ser
Ser Leu Ser Phe Ile Asp Cys Cys Gln Ser Thr Val Ile Val Pro Lys
                   70
                                       75
Met Leu Leu Asn Phe Val Thr Glu Lys Asn Val Ile Leu Tyr Pro Glu
Cys Ile Ala Gln Phe Tyr Phe Phe Cys Thr Phe Val Val Ala Lys Cys
           100
                               105
His Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser Asn
       115
                           120
                                               125
Pro Leu Leu Tyr Lys Val Thr Met Ser Tyr Gln Val Cys Leu Leu Met
                       135
Val Ala Val Val Tyr Gly Ile Gly Leu Ile Ser Ala Thr Ala His Thr
                   150
                                        155
Val Phe Leu Leu Arg Leu Phe Phe Cys Lys Ala Asp Lys Ile Asn His
               165
                                   170
Tyr Phe Cys Asp Leu Phe Pro Leu Leu Glu Leu Ser Cys Ser Ser Thr
           180
                               185
Phe Ile Asn Glu Ile Leu Ala Leu Ser Phe Ser Ala Phe Asn Ile Ile
                           200
Val Pro Ala Met Thr Ile Ile Gly Ser Tyr Ile Phe Ile Ile Ser
                       215
                                            220
Ile Leu His Ile Lys Ser Ser Gly Gly Arg Val Lys Ala Phe Ser Thr
                   230
                                        235
Tyr Ser Ser His Ile Leu Ala Val Ala Ile Phe Phe Gly Ser Thr Thr
                                   250
               245
Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp Gln Trp Lys
                               265
Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Val Leu Asn Leu Met
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Val Ala Leu Lys Met Leu
                       295
Leu Gln Lys Met Phe Pro Gln Asn Lys Glu
                   310
```

<211> 310

<212> PRT

<213> Mus musculus

<400> 1934

 Met
 Ser
 Asn
 Tyr
 Thr
 Gly
 Gln
 Phe
 Ser
 Asp
 Phe
 Thr
 Leu
 Val
 Gly
 Phe
 10
 Thr
 Leu
 Leu
 15
 Thr
 Phe
 15
 Thr
 Phe
 10
 Thr
 Leu
 Leu

```
85
                                   90
Gly Met Gln Met Phe Leu Tyr Leu Ser Ile Gly Gly Ser Glu Phe Leu
           100
                               105
                                                   110
Leu Leu Ala Ala Met Ser Tyr Asp Arg Tyr Val Ala Ile Cys His Pro
                           120
Leu Arg Tyr Pro Val Leu Met Asn His Arg Ile Cys Leu Leu Leu
                       135
Ser Val Cys Trp Leu Leu Gly Ser Leu Asp Gly Phe Met Leu Thr Pro
                   150
                                       155
Val Thr Met Thr Phe Pro Ile Cys Gly Ser Arg Glu Ile His His Phe
                                   170
Phe Cys Glu Val Pro Ala Val Thr Lys Leu Ser Cys Ser Asp Thr Trp
           180
                               185
Leu Tyr Glu Thr Leu Met Tyr Val Cys Cys Val Leu Met Ile Leu Ile
                           200
Pro Val Thr Val Ile Ser Gly Ser Tyr Ser Ser Ile Leu Leu Thr Val
                       215
                                           220
Leu Arg Met Asn Ser Ala Glu Gly Arg Lys Lys Ala Leu Ala Thr Cys
                    230
                                        235
Ser Ser His Met Thr Val Val Thr Leu Phe Tyr Gly Ala Ala Val Tyr
                245
                                    250
Thr Tyr Met Leu Pro Ala Ser Leu His Thr Pro Glu Lys Asp Met Val
            260
                               265
Val Ser Val Phe Tyr Thr Ile Val Thr Pro Leu Leu Asn Pro Leu Ile
                           280
Tyr Ser Phe Arg Asn Lys Asn Val Thr Glu Ala Met Lys Lys Leu Leu
                      295
Gly Val Ser Ile Pro His
```

<211> 306

<212> PRT

<213> Mus musculus

<400> 1935

Met Glu Ser Gly Asn His Ser Cys Gly Thr Glu Phe Thr Leu Val Gly 10 Leu Phe Gln Tyr Gly His Met Asp Thr Phe Leu Phe Thr Leu Ile Ala 25 Ile Leu Phe Ala Val Ala Leu Met Gly Asn Ile Thr Leu Val Leu Leu 40 Ile Arg Leu Asp Arg Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 60 Gln Leu Ser Ile Ile Asp Met Met Tyr Ile Ser Thr Thr Val Pro Lys 70 Met Ala Ala Asn Phe Leu Ser Asp Thr Lys Ala Ile Ser Phe Leu Gly 90 Cys Ala Val Gln Thr Phe Val Phe Leu Thr Leu Gly Gly Ser Glu Ala 105 Leu Leu Gly Phe Met Ser Tyr Asp Arg Tyr Ile Ala Ile Cys Gln 120 Pro Leu His Tyr Pro Val Leu Met Ser Arg Lys Ile Cys Cys Ser Met 135 140 Val Ala Gly Ala Trp Ser Ser Ser Ile Asn Ala Phe Met His Thr 150 155

```
Val Tyr Val Phe Gln Leu Pro Phe Cys Gly Ser Arg Met Val Asn His
               165
                                   170
Phe Phe Cys Glu Val Pro Ser Leu Leu Pro Leu Val Cys Glu Asp Thr
                   185
Ser Gln Tyr Glu His Thr Val Leu Val Ser Gly Leu Val Ile Leu Leu
                           200
                                               205
Leu Pro Phe Leu Ala Ile Leu Ala Ser Tyr Ala Arg Val Leu Val Val
                       215
                                          220
Val Leu Gln Met Gly Ser Gly Lys Gly Gln Ser Arg Ala Val Ser Thr
                 230
                                      235
Cys Ser Ser His Leu Thr Val Ala Ser Leu Phe Tyr Val Thr Thr Leu
               245
                                   250
Ser Thr Tyr Thr Gln Pro His Ser Leu His Ser Pro Gly Arg Asp Lys
                               265
Val Val Ala Val Leu Tyr Ser Ile Val Thr Pro Val Leu Asn Pro Phe
                          280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Met Gly Ala Leu Arg Arg Gln
                       295
Arg Gly
305
```

<211> 306

<212> PRT

<213> Mus musculus

<400> 1936

Met Glu Thr Gly Asn His Ser Cys Gly Thr Asp Phe Thr Leu Val Gly 10 Leu Phe Gln Tyr Gly His Met Asp Thr Phe Leu Phe Thr Val Ile Ser 25 Ile Leu Phe Ala Val Ala Leu Ile Gly Asn Ile Thr Leu Val Leu Leu Ile Arg Leu Asp Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 Gln Leu Ser Ile Ile Asp Met Met Cys Ile Ser Thr Thr Val Pro Lys 70 75 Met Gly Ala Asn Phe Leu Ser Asp Thr Lys Ala Ile Ser Val Leu Gly 85 90 Cys Glu Ile Gln Val Phe Met Phe Met Ser Leu Ala Gly Cys Glu Ala 100 105 Leu Leu Gly Phe Met Ser Tyr Asp Arg Tyr Ile Ala Ile Cys Gln 120 115 125 Pro Leu His Tyr Pro Val Leu Met Ser Arg Lys Ile Cys Cys Ser Met 135 140 Val Ala Ser Ala Trp Ser Ser Ser Ile Asn Ala Leu Ala His Thr 150 155 Val Tyr Val Phe Gln Leu Pro Phe Cys Gly Ser Arg Met Val Asn His 170 165 Phe Phe Cys Glu Val Pro Ser Leu Leu Pro Leu Val Cys Glu Asp Thr 185 Ser Gln Tyr Glu His Met Ile Val Met Ser Val Leu Val Leu Val Leu 200 205 Leu Pro Phe Leu Ala Ile Leu Ala Ser Tyr Ala Arg Val Leu Val Val 210 215 220 Val Phe Gln Met Gly Ser Gly Lys Gly Gln Ser Arg Ala Val Ser Thr

```
225
                   230
                                       235
Cys Ser Ser His Leu Thr Val Ala Ser Leu Phe Tyr Val Thr Gly Leu
              245
                                  250
Cys Thr Tyr Thr Gln Pro His Ser Leu His Ser Pro Gly Arg Asp Lys
                                265
Val Val Ala Val Leu Tyr Ser Ile Val Thr Pro Val Leu Asn Pro Phe
                            280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Ile Gly Ala Leu Arg Arg Gln
               295
Met Gly
305
<210> 1937
<211> 321
<212> PRT
<213> Mus musculus
<400> 1937
Met Ala Phe Leu His Asn Gly Asn His Thr Ala Val Thr Glu Phe Ile
Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Arg Ile Val Leu Phe Thr
                                25
Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr
Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe
                       55
Phe Leu Ser His Leu Ala Ser Ala Asp Ile Gly Tyr Ser Ser Ser Val
                   70
                                        75
Thr Pro Asn Met Leu Val Asn Phe Leu Val Lys Gln Asn Thr Ile Ser
               85
                                   90
Tyr Ile Gly Cys Ser Ile Gln Phe Gly Ser Ala Ala Phe Phe Gly Gly
                               105
Leu Glu Cys Phe Leu Leu Ala Val Met Ala Tyr Asp Arg Phe Val Ala
       115
                           120
Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Gln Val Cys
                       135
                                           140
Val Gln Leu Val Val Gly Ser Tyr Ile Gly Gly Phe Leu Asn Ala Ser
                  150
                                       155
Phe Ala Thr Val Ser Phe Leu Phe Leu Phe Phe Cys Gly Pro Asn Ile
               165
                                   170
Ile Asn His Phe Phe Cys Asp Phe Ala Pro Leu Ile Glu Leu Ser Cys
           180
                               185
Ser Asp Val Arg Ile Ser Val Leu Val Thr Ser Phe Ser Ala Gly Thr
       195
                           200
                                               205
Val Thr Met Leu Thr Val Leu Val Ile Ala Ile Ser Tyr Thr Tyr Ile
                       215
Leu Ile Thr Ile Leu Lys Met Arg Ser Thr Glu Gly Arg His Lys Ala
                   230
                                        235
Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Ser Leu Phe Tyr Gly
                                   250
Thr Ile Thr Phe Ile Tyr Val Met Pro Lys Ser Arg Tyr Ser Thr Asp
                               265
Gln Asn Lys Val Val Ser Val Phe Tyr Met Val Val Ile Pro Met Leu
                           280
                                               285
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Gly Ala Leu
                       295
```

Arg Arg His Leu Gly Lys Lys Ile Phe Ser Gln Ser Asn Ile Leu Phe 305 Tyr

<210> 1938 <211> 314 <212> PRT <213> Mus musculus <400> 1938 Met Ala Phe Leu Glu Asn Gly Asn His Thr Ala Val Ser Glu Phe Ile 10 Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Arg Ile Val Leu Phe Thr 20 25 Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe 55 Phe Leu Ser His Leu Ala Ser Ala Asp Ile Gly Leu Ser Ser Ser Val 75 Thr Pro Asn Met Leu Val Asn Phe Leu Val Glu Arg Ser Thr Ile Ser 85 90 Tyr Leu Gly Cys Gly Ile Gln Leu Ser Ser Ala Ala Leu Phe Gly Ala 105 Thr Glu Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Phe Met Ala 115 120 Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Lys Val Cys 135 140 Val Gln Leu Ile Val Gly Ser Tyr Ile Ala Gly Phe Leu Asn Ala Ser 150 155 Ser Phe Leu Leu Ser Phe Phe Ser Leu Leu Phe Cys Gly Gln Asn Ile 170 165 Ile Asn Asp Phe Phe Cys Asp Phe Ala Pro Leu Ala Glu Leu Ser Cys 185 Ser Asp Val Ser Val Phe Val Val Val Ile Ser Phe Ser Ala Gly Thr 195 200 205 Val Thr Met Leu Thr Val Phe Val Ile Ala Ile Ser Tyr Ser Tyr Ile 215 Leu Ile Thr Ile Leu Lys Met Arg Ser Thr Glu Gly Arg Gln Lys Ala 230 235 Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Phe Tyr Gly 245 250 Thr Val Thr Phe Ile Tyr Val Met Pro Lys Ser Ser Tyr Ser Met Asp 260 265 Gln Asn Lys Ile Ile Ser Val Phe Tyr Met Val Val Pro Met Leu 280 285 Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Gly Ala Leu 295 Lys Arg His Phe Asp Arg Lys Thr Phe Ser 305 310

<210> 1939 <211> 314

<212> PRT

<400> 1939

```
Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Arg Val Ile Leu Phe Thr
Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Ser Gly Asn Leu Ser Thr
                            40
Ile Leu Leu Ile Arg Val Ser Ser Gln Leu His His Pro Met Tyr Phe
                        55
Phe Leu Ser His Val Gly Ser Val Asp Ile Gly Tyr Ser Ser Ser Val
                    70
                                        75
Thr Pro Asn Met Leu Val Asn Phe Leu Val Glu Lys His Thr Ile Ala
                                    90
               8.5
Tyr Leu Gly Cys Gly Ile Gln Leu Ser Ser Ala Ala Phe Phe Gly Thr
           100
                               105
Ala Glu Cys Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Phe Val Ala
       115
                            120
                                                125
Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Thr Gln Thr Cys
                        135
Ile Gln Leu Val Val Gly Ser Tyr Thr Gly Gly Ile Leu Asn Ala Ser
                    150
                                        155
Phe Ala Ile Ile Ser Phe Phe Ser Phe Leu Phe Cys Gly Pro Asn Arg
                                    170
Ile Asn His Phe Tyr Cys Asp Phe Ala Pro Leu Val Glu Leu Ser Cys
           180
                                185
Ser Asp Ile Asn Val Ser Val Val Ile Thr Thr Ile Phe Ser Ala Ser
                            200
                                                205
Val Thr Ile Ile Thr Val Phe Val Ile Ala Ile Ser Tyr Thr Tyr Ile
                        215
                                            220
Leu Ile Thr Ile Leu Lys Met Arg Ser Thr Glu Gly Arg His Lys Ala
                    230
                                        235
Phe Ser Thr Cys Thr Ser Tyr Leu Thr Ala Val Thr Leu Phe Tyr Gly
                245
                                    250
Thr Val Thr Phe Ile Tyr Val Val Pro Lys Ser Asn Tyr Ser Thr Asp
                                265
Gln Asn Lys Val Ala Ser Val Phe Tyr Ile Val Val Ile Pro Met Leu
                           280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Asp Ile Lys Gly Ala Leu
                       295
                                            300
Lys Arg Gln Leu Gly Lys Lys Thr Phe Ser
<210> 1940
<211> 314
<212> PRT
<213> Mus musculus
<400> 1940
Met Ala Phe Ile Tyr Asn Gly Ser Gln Thr Thr Val Thr Glu Phe Ile
Leu Leu Gly Leu Thr Asp Asp Pro Val Leu Lys Val Ile Leu Phe Cys
                                25
Ile Ile Leu Cys Ile Tyr Leu Val Thr Val Phe Gly Asn Leu Ser Thr
```

Met Ala Phe Leu Glu Asp Gly Asn His Thr Ala Val Thr Glu Phe Ile

```
Ile Leu Leu Ile Gly Val Ser Ser Lys Leu His His Pro Met Tyr Phe
                        55
Phe Leu Ser His Leu Ala Ser Val Asp Met Gly Leu Ser Ser Val
                    70
                                        75
Thr Pro Asn Met Leu Val Asn Phe Leu Thr Glu Lys Asn Thr Ile Ser
Tyr Leu Gly Cys Gly Ile Gln Leu Ser Ser Ala Ala Phe Phe Gly Ala
            100
                                105
Val Glu Phe Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Leu Val Ala
                            120
Ile Cys Asn Pro Leu Leu Tyr Ser Thr Lys Met Ser Ser Gln Val Cys
                       135
                                            140
Ile Gln Leu Val Ala Gly Ser Tyr Val Gly Gly Phe Leu Asn Ala Ser
                   150
                                        155
Phe Val Thr His Phe Phe Phe Ser Phe Leu Phe Cys Gly Pro Asn Arg
               165
                                    170
Val Asn His Phe Phe Cys Asp Leu Ser Pro Met Met Glu Leu Ser Cys
                               185
Ser Asp Val Ser Ile Ser Glu Ile Val Ile Ser Phe Ser Ala Gly Ser
                            200
Phe Thr Met Thr Thr Leu Phe Val Ile Val Ile Pro Tyr Phe Tyr Ile
                        215
                                            220
Phe Ile Thr Ile Leu Lys Ile Arg Ser Thr Glu Gly Arg Gln Lys Ala
                   230
                                        235
Phe Ser Thr Cys Thr Ser His Leu Thr Ala Val Thr Leu Tyr Tyr Gly
               245
                                   250
Thr Ile Ile Phe Ile Tyr Val Met Pro Lys Ser Thr Tyr Ser Arg Asp
           260
                                265
Gln Asn Lys Val Val Ser Leu Phe Tyr Met Leu Val Ile Pro Val Leu
       275
                           280
                                               285
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Asn Glu Ile Lys Asp Ala Leu
                       295
                                            300
Lys Arg Gln Phe Tyr Arg Lys Thr Leu Leu
```

<210> 1941 <211> 310 <212> PRT

<213> Mus musculus

<400> 1941

Met Asn Gly Gly Asn His Thr Ser Met Thr Glu Leu Phe Ile Leu Gly 10 Pro Thr Glu Asp Pro Thr Phe Cys Ile Ala Phe Phe Val Ile Phe Leu 2.0 25 Gly Val Tyr Met Val Thr Leu Val Gly Asn Ile Ser Ile Ile Thr Leu 40 Ile Arg Ile Ser Ser Gln Leu His Thr Pro Val Tyr Leu Phe Leu Asn His Leu Ala Phe Val Asp Ile Leu Tyr Ser Thr Leu Val Ser Val Ile 70 75 Met Leu Met Glu Leu Leu Glu His Glu Leu Ala Leu Pro Val Ala Ala 90 Cys Ala Ala Glu Leu Cys Ile Thr Val Leu Phe Gly Ser Ser Glu Cys 105 Phe Leu Leu Ala Ala Met Ala Tyr Asp Cys Tyr Val Ala Ile Cys Ser

```
115
                          120
                                              125
Pro Leu Leu Tyr Ser Thr Leu Met Ser Ser Arg Val Cys Phe Leu Leu
                      135
                                           140
Leu Gly Met Ser Tyr Val Gly Gly Cys Met Asn Gly Trp Ile Phe Thr
                   150
                                       155
Gly Cys Leu Leu Asn Leu Ser Phe Tyr Gly Pro Tyr Gln Ile Asp His
               165
                                   170
Phe Phe Cys Asp Phe Ser Pro Leu Leu Lys Leu Ser Cys Ser Asp Val
                               185
Ser Ile Ile Gly Ile Ile Pro Ser Ile Ser Ser Gly Ser Ile Ile Val
                           200
Val Thr Val Leu Val Ile Ala Val Phe Tyr Ile Cys Ile Leu Met Thr
                       215
                                           220
Ile Leu Lys Met His Ser Thr Asp Gly Cys His Lys Ala Phe Ser Thr
                                       235
                   230
Cys Asn Ser Tyr Leu Thr Ala Val Thr Leu Tyr Tyr Gly Thr Ile Thr
               245
                                  250
Phe Ile Tyr Val Met Pro Lys Ser Asn Tyr Ser Thr Glu Lys Asn Lys
           260
                               265
                                                   270
Val Leu Ser Glu Phe Tyr Thr Val Val Ile Pro Met Leu Asn His Leu
Ile Tyr Ser Leu Lys Asn Arg Asp Val Lys Asp Ala Leu Arg Lys Ala
                   295
Ile Val Arg Val Tyr Thr
```

<210> 1942 <211> 308

<212> PRT <213> Mus musculus

<400> 1942

Met Glu Ile Lys Asn Ser Ser Val Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Gln Ser Gln Glu Ala Gln Leu Leu Val Phe Ala Leu Ile Ser 25 Val Phe Tyr Leu Ile Ile Leu Pro Gly Asn Phe Leu Ile Ile Phe Thr 40 Ile Arg Ser Asp Ser Gly Leu Thr Ala Pro Leu Tyr Phe Phe Leu Gly 55 Asn Leu Ala Phe Leu Asp Ala Ser Tyr Ser Phe Ile Val Ala Pro Arg 75 Met Leu Val Asp Phe Phe Cys Glu Lys Lys Val Ile Ser Tyr Lys Ala 85 90 Cys Ile Thr Gln Leu Phe Phe Leu His Phe Leu Gly Ala Gly Glu Met 105 Phe Leu Leu Val Val Met Ala Val Asp Arg Tyr Ile Ala Ile Cys Arg 120 Pro Leu Tyr Tyr Ser Thr Leu Met Asn Pro Arg Val Cys Tyr Ala Leu 135 Leu Leu Ala Leu Trp Leu Gly Gly Phe Ala His Ser Ile Val Gln Val 150 Ala Leu Ile Leu Asn Leu Pro Phe Cys Gly Pro Asn Gln Leu Asp Asn 165 170 Phe Phe Cys Asp Val Pro Gln Val Val Lys Leu Ala Cys Thr Asp Thr 185

```
Phe Ala Val Glu Leu Leu Met Val Ser Asn Ser Gly Leu Leu Thr Leu
       195
                           200
Leu Cys Phe Leu Gly Leu Leu Ala Ser Tyr Ala Val Ile Leu Tyr His
                       215
                                           220
Val Lys Gly His Ser Ser Glu Gly Lys Ser Lys Ala Ile Ser Thr Cys
                   230
                                       235
Thr Thr His Ile Ile Ile Val Phe Leu Met Phe Gly Pro Ala Ile Phe
               245 .
                                   250
Ile Tyr Thr Arg Pro Phe Gln Ala Leu Gln Ala Asp Lys Val Val Ser
                               265
Leu Phe His Thr Val Ile Phe Pro Leu Met Asn Pro Val Ile Tyr Thr
                           280
                                               285
Leu Arg Asn Gln Glu Val Lys Thr Ser Met Arg Lys Leu Leu Ser Gln
           295
Tyr Val Ile Cys
305
```

<210> 1943 <211> 318 <212> PRT <213> Mus musculus

<400> 1943

Met Met Asn Val Ala Asn Lys Ser Val Val Thr Glu Phe Val Leu Leu 10 Gly Leu Ser Asn Ser Trp Glu Leu Gln Ile Phe Phe Phe Ile Val Phe 25 Ser Leu Phe Tyr Val Ala Thr Met Val Ser Asn Ser Met Ile Val Leu 40 Ile Val Ile Ser Asp Ser His Leu His Ser Ala Met Tyr Phe Leu Leu Thr Asn Leu Ser Ile Ile Asp Met Ser Leu Ala Ser Phe Ala Thr Pro 70 75 Lys Met Ile Ile Asp Tyr Leu Thr Asp His Lys Thr Ile Ser Phe Asp Gly Cys Ile Ala Gln Ile Phe Phe Leu His Leu Phe Thr Gly Thr Glu 100 105 Ile Ile Leu Leu Met Ala Met Ser Phe Asp Arg Tyr Ile Ala Ile Cys 120 Lys Pro Leu Arg Tyr Ala Ser Ile Ile Ser Pro Gln Val Cys Ile Ala 135 140 Phe Val Val Ser Ser Trp Ile Val Gly Thr Met His Ser Met Ser Gln 150 155 Val Ile Phe Ala Leu Thr Leu Pro Phe Cys Gly Pro Asn Lys Ile Asp 165 170 Ser Phe Phe Cys Asp Leu Pro Val Val Phe Gln Leu Ser Cys Val Asp 185 180 Thr Tyr Val Leu Gly Leu Phe Met Ile Ser Thr Ser Gly Ile Ile Ala 200 Leu Ser Cys Phe Ile Leu Leu Phe Asn Ser Tyr Ile Ile Val Leu Val 215 220 Thr Ile Lys His His Ser Ser Lys Gly Ser Ser Lys Ala Leu Ser Thr 230 235 Cys Thr Ala His Phe Ile Val Val Phe Met Phe Phe Gly Pro Cys Ile 245 250 Phe Ile Tyr Met Trp Pro Gln Asn Ser Phe Val Ile Glu Lys Ile Leu Ser Val Phe Tyr Thr Ile Phe Thr Pro Ile Met Asn Pro Val Ile Tyr 275

Thr Leu Arg Asn His Glu Val Asn Ser Ala Met Arg Lys Leu Arg Ser 290

Lys Phe Leu Asn Phe Ser Thr Glu Thr Pro Ser Tyr Ser Leu 305

<210> 1944 <211> 309 <212> PRT <213> Mus musculus

<400> 1944

Met Asp Tyr Glu Asn Gly Ser Ala Val Thr Glu Phe Ile Leu Val Gly Phe Ser Arg Asp Trp Gln Leu Gln Ile Phe Phe Phe Val Thr Phe Thr 25 Leu Ile Tyr Gly Ala Thr Val Val Gly Asn Ile Leu Ile Ile Val Thr Val Ala Ala Asn Ser Ala Leu His Ser Pro Met Tyr Phe Leu Leu Gly 55 60 Asn Leu Ser Phe Leu Asp Met Cys Leu Ser Thr Val Thr Thr Pro Lys Met Ile Thr Asp Leu Leu Ala Ala His Lys Ser Ile Ser Phe Gln Gly 85 90 Cys Met Val Gln Met Phe Phe Ser His Phe Phe Gly Gly Ala Glu Met 100 105 Thr Leu Leu Ile Val Met Ala Phe Asp Arg Tyr Val Ala Ile Cys Lys 120 125 Pro Leu His Tyr Arg Ile Ile Met Ser His Arg Leu Leu Asn Arg Phe 135 140 Ile Ile Leu Ser Trp Thr Ile Gly Phe Ile His Thr Met Ser Gln Met 150 155 Ala Leu Thr Val Asn Leu Pro Phe Cys Gly His Asn Ile Ile Asn Asn 165 170 Ile Phe Cys Asp Leu Pro Leu Val Ile Lys Leu Ala Cys Ile Glu Thr 180 185 Tyr Thr Leu Glu Leu Phe Val Ile Ala Asp Ser Gly Leu Leu Ser Phe 200 205 Ile Ser Phe Phe Leu Leu Val Ser Tyr Thr Val Ile Leu Leu Ile 215 220 Val Lys His Lys Ser Pro Gly Ser Leu Ser Lys Ala Leu Ser Thr Leu 230 235 Ser Ala His Ile Ile Val Val Thr Leu Phe Phe Gly Pro Cys Ile Phe 245 250 Ile Tyr Ala Trp Pro Phe Gly Ser Phe Ala Ser Asn Thr Thr Leu Ala 260 265 Val Phe Tyr Thr Val Ile Thr Pro Leu Leu Asn Pro Ile Ile Tyr Thr 280 Leu Arg Asn Gln Glu Met Lys Lys Ala Met Arg Lys Leu Trp Asn Gln 295 300 Gln Val Ser Cys Arg 305

```
<211> 322
<212> PRT
<213> Mus musculus
<400> 1945
Met Ala Thr Ser Val His Arg Asn Gly Ser Leu Thr Pro Val Ser Leu
                5
                                    10
Gln Gly Phe Val Leu Val Gly Phe Gly Gly Ser Ala Glu Thr Gln Ala
                               25
Leu Leu Phe Ala Val Phe Leu Val Leu Tyr Val Val Thr Ile Leu Gly
                            40
Asn Leu Thr Met Ile Met Val Ile Thr Leu Asp Ala Arg Leu His Ser
                       55
Pro Met Tyr Phe Phe Leu Lys Asn Leu Ser Phe Val Asp Leu Cys Leu
                   70
                                       75
Ser Ser Val Ile Ile Pro Asn Ala Leu Ala Asn Ile Phe Ser Ser Ser
                                   90
Lys Thr Ile Ser Phe Ala Gly Cys Ala Thr Gln Phe Phe Phe Ser
            100
                                105
Leu Leu Ala Ala Thr Glu Ala Val Leu Leu Ala Val Met Ala Tyr Asp
                            120
       115
                                                125
Arg Phe Met Ala Ile Cys Ser Pro Leu Arg Tyr Pro Val Thr Met Cys
                       135
                                           140
Pro Met Thr Cys Ala Arg Leu Val Leu Gly Thr Phe Cys Val Ala Cys
                   150
                                       155
Leu Asn Ser Ile Val Gln Thr Ser Leu Thr Phe Gln Leu Pro Phe Cys
               165
                                  170
Ser Ser Asn Tyr Ile Asp Tyr Phe Phe Cys Asp Val Pro Pro Leu Leu
           180
                               185
Gln Leu Ala Cys Ala Ser Thr Ala Ile Asn Glu Leu Val Met Phe Gly
                           200
                                               205
Ile Cys Gly Phe Ile Ile Val Cys Ala Val Phe Val Val Ile Ile Ser
   210
                        215
Tyr Gly Tyr Ile Thr Val Thr Ile Leu Arg Met Arg Ser Gly Ser Gly
                                        235
Arg His Lys Val Phe Ser Thr Cys Gly Ser His Met Thr Ala Val Ser
                245
                                    250
Leu Phe Tyr Gly Thr Gly Phe Val Ile Tyr Gly Gln Pro Gly Gly Val
                               265
Ala Ser Met Glu Gln Gly Lys Val Val Ser Thr Ile Tyr Thr Leu Val
                            280
                                                285
Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val
                       295
                                           300
Lys Asp Ala Leu Arg Arg Leu Gly Gln Arg His Ser Leu Val Lys Glu
305
                   310
                                        315
Ser Gly
```

```
<210> 1946
```

<400> 1946

Met Ala Ile Ala Val Tyr Arg Asn Gly Ser Leu Ser Ala Val Ser Leu

<211> 323

<212> PRT

<213> Mus musculus

```
10
Gln Gly Phe Val Leu Val Gly Phe Gly Gly Ala Glu Thr Gln Ala
                               25
Leu Leu Phe Ala Val Phe Leu Val Leu Tyr Val Val Thr Ile Leu Gly
Asn Leu Thr Met Ile Val Val Ile Thr Leu Asp Ala Arg Leu His Ser
                       55
Pro Met Tyr Phe Phe Leu Lys Asn Leu Ser Phe Val Asp Leu Cys Tyr
                   70
                                       75
Ser Ser Ala Ile Ala Pro Asn Ala Leu Ala Asn Phe Leu Ser Thr Ser
                                   90
               8.5
Lys Val Ile Ser Phe Glu Ala Cys Ala Thr Gln Leu Phe Phe Ser
           100
                               105
Leu Leu Ala Thr Thr Glu Ala Phe Leu Leu Ala Val Met Ala Tyr Asp
                           120
                                               125
Arg Phe Met Ala Ile Cys Ser Pro Leu Arg Tyr Pro Val Thr Met Cys
                      135
Pro Thr Thr Cys Thr Arg Leu Val Leu Gly Thr Tyr Cys Gly Gly Cys
                   150
                                       155
Leu Asn Ser Ile Val Gln Thr Ser Leu Thr Phe Gln Leu Pro Phe Cys
                                   170
Ser Ser Asn Arg Ile Asp His Phe Tyr Cys Asp Val Pro Pro Leu Leu
                               185
Gln Leu Ala Cys Ala Ser Thr Ala Leu Asn Glu Leu Phe Leu Phe Gly
                           200
Leu Cys Gly Phe Ile Ile Val Ser Thr Thr Leu Ala Val Leu Val Ser
                       215
                                            220
Tyr Gly Tyr Ile Thr Val Thr Ile Leu Arg Met His Ser Gly Ser Gly
                   230
                                       235
Arg His Lys Val Phe Ser Thr Cys Gly Ser His Met Ala Val Ser
                                   250
               245
Leu Phe Tyr Gly Thr Val Phe Val Met Tyr Ala Gln Pro Gly Ala Val
                               265
Ala Ser Met Ala Gln Gly Lys Val Ile Ser Val Phe Tyr Thr Leu Val
                           280
Ile Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Asp Val
                       295
                                           300
Lys Asp Ala Leu Arg Arg Leu Gly Gln Arg His Ser Leu Val Lys Lys
305
                   310
Gly Gly Lys
```

```
<210> 1947
<211> 316
<212> PRT
```

<213> Mus musculus

<400> 1947

 Met
 Met
 Thr
 Leu
 Ser
 Trp
 Glu
 Asn
 Gln
 Thr
 Val
 Ile
 Val
 Glu
 Phe
 Val

 Leu
 5
 5
 1e
 1

```
Phe Leu Val Asn Leu Ser Phe Leu Glu Val Cys Tyr Thr Ser Asn Ile
                   70
                                        75
Val Pro Lys Met Leu Leu Ile Ile Ile Ala Asp Gln Lys Thr Ile Ser
Val Val Gly Cys Leu Ala Gln Phe Tyr Phe Phe Gly Ser Leu Ala Ala
            100
                                105
Thr Glu Cys Leu Leu Ala Val Met Ser Tyr Asp Arg Tyr Leu Ala
                            120
Ile Cys Gln Pro Leu Arg Tyr Pro Ile Leu Met Thr Gly Ser Leu Cys
                       135
Phe Arg Leu Ala Ile Gly Ser Trp Phe Cys Cys Phe Phe Leu Thr Ala
                   150
                                       155
Ile Thr Met Val Leu Leu Cys Arg Gln Asn Phe Cys Gly Pro Asn Glu
               165
                                   170
Ile Asp His Phe Phe Cys Asp Phe Ala Pro Leu Ile His Leu Ser Cys
           180
                               185
Met Asp Thr Ser Leu Ile Glu Thr Val Ala Phe Ala Thr Ser Ser Ala
                           200
Val Thr Leu Val Pro Phe Phe Leu Ile Thr Ile Ser Tyr Ser Cys Ile
                       215
Leu Ile Ala Ile Leu Arg Ile Pro Ser Gly Thr Gly Arg Lys Lys Ala
                    230
                                        235
Phe Ser Thr Cys Ser Ser His Leu Thr Val Val Thr Val Phe Tyr Gly
               245
                                   250
Thr Leu Ile Ala Thr Tyr Leu Val Pro Ser Ala Asn Ser Ser Gln Tyr
                               265
Leu Arg Lys Gly Phe Ser Leu Leu Tyr Thr Ile Leu Thr Pro Met Phe
                           280
Asn Pro Ile Ile Tyr Ser Leu Arg Asn Arg Asp Ile His Glu Ala Leu
                       295
Lys Lys Cys Leu Ser Lys Lys Ser Asp Phe Leu Ile
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1948

Met Val Glu Asn Phe Asn Ala Ser Trp Glu Gly Tyr Phe Ile Phe Leu 10 Gly Phe Ser Lys Trp Pro His Leu Glu Val Val Leu Phe Val Val Ile 25 Leu Ile Phe Tyr Met Met Thr Leu Met Gly Asn Leu Phe Ile Ile Ile 40 Leu Ser His Leu Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu 55 Ser Asn Leu Ser Ala Leu Asp Leu Cys Tyr Thr Thr Ser Ser Val Pro 70 Gln Leu Leu Phe Asn Leu Trp Gly Pro Lys Lys Thr Ile Ser Tyr Ala 85 90 Gly Cys Met Leu Gln Leu Tyr Phe Val Leu Ala Leu Gly Thr Thr Glu 105 Cys Val Leu Leu Val Val Met Ser Tyr Asp Arg Tyr Val Ala Val Cys 120 125 Lys Pro Leu His Tyr Ser Val Leu Met Asn Pro Arg Phe Cys Gln Leu

```
130
                      135
Leu Ala Ala Ser Trp Val Cys Gly Phe Thr Thr Ser Ala Leu His
                  150
                                       155
Ser Ser Phe Thr Phe Trp Val Pro Leu Cys Gly His Arg Lys Val Asp
               165
                                   170
His Phe Phe Cys Glu Val Pro Ala Leu Leu Gln Leu Ser Cys Val Asp
           180
                               185
Ile His Ala Asn Glu Met Thr Leu Met Val Met Ser Ala Ile Phe Val
                           200
Val Ile Pro Leu Ile Leu Ile Leu Ser Ser Tyr Ala Ala Ile Ala Trp
                       215
Thr Val Leu Glu Met Gln Ser Thr Thr Arg Leu Gln Lys Val Phe Gly
                   230
                                       235
Thr Cys Gly Ala His Leu Thr Val Val Ser Leu Phe Phe Ile Pro Ile
               245
                                   250
Met Cys Ile Tyr Leu Gln Pro Ser Thr Lys Ser Ser Gln Asp His Ala
           260
                               265
Lys Phe Ile Ala Leu Phe Tyr Thr Val Val Thr Pro Ser Leu Asn Pro
                           280
Leu Ile Tyr Thr Leu Arg Asn Lys Asp Val Arg Gly Ala Ile Arg Arg
                       295
Leu Ser Arg Tyr Glu Arg Glu Lys
                   310
```

<211> 317

<212> PRT

<213> Mus musculus

<400> 1949

Met Thr Ile Asn Lys Ser Ser Gly Gly Asp Phe Ile Leu Val Gly Phe 10 Ser Asp Gln Pro Gln Leu Glu Lys Ile Leu Phe Val Leu Val Leu Ile Ser Tyr Leu Leu Thr Leu Val Gly Asn Thr Ala Ile Ile Leu Val Ser 40 Cys Leu Asp Ser Ala Leu Gln Thr Pro Met Tyr Tyr Phe Leu Thr Asn 55 Leu Ser Phe Val Asp Ile Cys Phe Ser Thr Ser Ile Val Pro Gln Leu 70 75 Leu Trp Asn Leu His Gly Pro Ala Lys Thr Ile Thr Ala Thr Gly Cys Ala Ile Gln Leu Tyr Val Ser Leu Ala Leu Gly Ser Thr Glu Cys Val 100 105 Leu Leu Ala Val Met Ala Phe Asp Arg Tyr Ala Ala Val Cys Arg Pro 120 Leu His Tyr Ala Thr Val Met His Pro Arg Leu Cys Gln Ser Leu Ala 135 Gly Val Ala Trp Leu Ser Gly Val Gly Asn Thr Leu Ile Gln Gly Thr 150 155 Ile Thr Leu Arg Leu Pro Arg Cys Gly Asn His Lys Ile Tyr His Phe 170 Ile Cys Glu Val Pro Ala Met Ile Lys Leu Ala Cys Val Asp Ile His 180 185 190 Ala Asn Glu Val Gln Leu Phe Met Ala Ser Leu Val Leu Leu Leu 200

```
Pro Leu Thr Leu Ile Leu Val Ser Tyr Gly Tyr Ile Ala Gln Ala Leu
                       215
Met Arg Leu Arg Ser Ala Leu Thr Trp Gly Lys Ala Leu Gly Thr Cys
                   230
                                       235
Gly Ser His Met Leu Val Val Leu Phe Tyr Gly Thr Ile Thr Ala
                245
                                    250
Ile Tyr Ile Gln Pro Asn Ser Ser Tyr Ala His Ser Gln Gly Lys Phe
                               265
Ile Thr Leu Leu Tyr Thr Val Val Ile Pro Thr Leu Asn Pro Leu Ile
                           280
Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Lys Arg Leu Val
                       295
Arg Lys Asn Asn Ser Thr Gly Lys Lys Ile Leu Ser Arg
                    310
```

<210> 1950 <211> 306 <212> PRT

<213> Mus musculus

<400> 1950

Met Glu Val Asn Arg Thr Leu Val Thr Ala Phe Ile Leu Arg Gly Ile Thr Asp Leu Pro Glu Leu Gln Val Pro Met Phe Leu Val Phe Phe Phe 20 25 Ile Tyr Val Thr Thr Met Val Gly Asn Leu Gly Leu Ile Val Leu Ile 40 Trp Lys Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Gly Ser 55 Leu Ala Phe Ala Asp Ala Cys Thr Ser Ser Ser Val Thr Pro Arg Met Leu Val Asn Ile Leu Asp Asn Gly Lys Met Ile Ser Leu Ser Glu Cys 90 Met Ala Gln Tyr Tyr Val Phe Gly Ser Ser Ala Thr Thr Glu Cys Phe 100 105 Leu Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro 120 125 Leu Leu Tyr Leu Val Val Met Ser Asn Arg Val Cys Thr Cys Leu Ile 135 140 Ser Gly Ser Tyr Ile Ile Gly Phe Leu His Pro Leu Ile His Val Gly 150 155 Leu Leu Phe Arg Leu Thr Phe Cys Lys Ser Asn Ile Ile Asp His Phe 165 170 Tyr Cys Glu Ile Leu Pro Leu Tyr Thr Ile Ser Cys Thr Asp Pro Ser 185 Ile Asn Ala Phe Val Val Phe Ile Phe Ala Ala Val Ile Gln Ala Val 200 Thr Phe Met Ser Ile Ala Val Ser Tyr Ala His Val Leu Phe Ser Ile 215 220 Leu Lys Thr Lys Ser Glu Lys Gly Arg Arg Lys Ala Phe Ser Thr Cys 230 235 Ser Ala His Leu Leu Ser Val Ser Leu Phe Tyr Gly Thr Leu Phe Phe 245 250 Met Tyr Val Ser Pro Gly Ser Gly Pro Ser Lys Tyr Lys Asn Lys Met 265 Tyr Ser Leu Phe Tyr Thr Ile Val Ile Pro Leu Leu Asn Pro Phe Ile

275 280 Tyr Ser Leu Arg Asn Lys Glu Val Leu Gly Ala Leu Arg Lys Ile Met 295 300 Lys Pro 305 <210> 1951 <211> 309 <212> PRT <213> Mus musculus <400> 1951 Met Glu Lys Lys Asn Glu Thr Leu Trp Thr Glu Phe Val Leu Thr Gly 1.0 Leu Thr Cys Leu Pro Gln Trp Lys Pro Leu Leu Phe Leu Val Phe Leu 25 Val Ile Tyr Phe Met Thr Ile Val Gly Asn Leu Gly Leu Ile Thr Leu Ile Trp Asn Asp Pro His Leu His Ile Pro Met Tyr Leu Phe Leu Ser 55 Asn Leu Ala Phe Val Asp Thr Trp Leu Ser Ser Thr Val Thr Pro Arg 70 75 Met Leu Phe Asn Leu Leu Asp Lys Gly Lys Val Ile Ser Val Ala Glu 90 Cys Lys Thr Gln Phe Phe Ser Phe Ala Ile Ser Val Thr Thr Glu Cys 105 Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Asn 120 125 Pro Leu Leu Tyr Pro Val Ile Met Thr Asn Arg Leu Cys Val Arg Leu 135 140 Leu Ala Leu Ser Phe Ile Gly Gly Phe Leu His Ala Val Ile His Glu 150 155 Ser Phe Leu Ser Arg Leu Thr Phe Cys Asn Ser Asn Ile Ile Tyr His 170 Phe Tyr Cys Asp Val Ile Pro Leu Leu Lys Ile Ser Cys Thr Asp Pro 180 185 Ser Leu Asn Tyr Leu Ile Ile Phe Ile Phe Ser Gly Ser Ile Gln Val 200 Phe Thr Ile Met Thr Val Leu Ile Ser Tyr Thr Phe Val Leu Phe Thr 215 220 Ile Leu Lys Lys Lys Ser Asp Lys Gly Ile Arg Lys Ala Phe Ser Thr 230 235 Cys Gly Ala His Leu Leu Ser Val Ser Leu Tyr Tyr Gly Pro Leu Leu 250 245 Phe Met Tyr Val His Pro Ala Ser Ser Glu Val Asp Asp Gln Asp Met 265 Ile Leu Ser Leu Phe Tyr Thr Val Ile Ile Pro Val Leu Asn Pro Ile 280 Ile Tyr Ser Leu Arg Asn Lys Gln Val Ile Asp Ser Leu Lys Lys Met 295 Leu Lys Met Met Val

<400> 1952 Met Gly Thr Glu Asn Thr Thr Leu Leu Thr Glu Phe Val Leu Thr Gly 1.0 Leu Ser His Gln Pro Gln Trp Lys Ile Pro Leu Phe Leu Leu Phe Leu 25 Val Ile Tyr Leu Ile Thr Ile Val Gly Asn Leu Gly Leu Ile Ile Leu 40 Ile Trp Asn Asp Pro Arg Leu Gln Ile Pro Met Tyr Leu Phe Leu Gly 55 Cys Leu Ala Leu Val Asp Thr Leu Leu Ser Ser Thr Val Thr Pro Lys 70 Met Leu Leu Thr Phe Thr Ala Lys Ser Lys Leu Ile Ser Leu Ser Glu 85 90 Cys Met Ile Gln Phe Phe Ser Phe Val Met Cys Ala Thr Met Glu Cys 105 Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Lys 120 115 Pro Leu Leu Tyr Pro Val Ile Met Thr Asn Arg Leu Cys Val Arg Leu 135 140 Leu Val Leu Thr Phe Val Thr Gly Ile Leu His Ala Ser Ile His Glu 150 155 Gly Met Leu Cys Arg Leu Thr Phe Cys Asn Ser Asn Val Ile His His 170 165 Phe Tyr Cys Asp Val Met Pro Leu Leu Lys Ile Ser Cys Thr Asp Pro 180 185 Ser Leu Asn Tyr Leu Ile Val Phe Ile Phe Ser Gly Ser Ile Gln Val 195 200 205 Phe Thr Ile Ser Thr Ile Leu Gly Ser Tyr Thr Leu Val Leu Phe Thr 215 220 Ile Leu Lys Lys Lys Ser Ala Lys Gly Ile Lys Lys Ala Phe Ser Thr 230 235 Cys Gly Ala His Leu Leu Ser Val Cys Leu Tyr Tyr Gly Ser Leu Leu 250 Phe Met Tyr Leu Leu Pro Ala Ser Gln Lys Ala Gln Asp Glu Asp Met 260 265 Met Asp Ser Val Phe Tyr Thr Val Ile Ile Pro Val Met Asn Pro Ile 280 Ile Tyr Ser Leu Arg Asn Lys Gln Ile Lys Asp Ser Leu Glu Lys Phe 295 300

<210> 1953 <211> 313 <212> PRT

Leu Lys Arg Asn Val

<213> Mus musculus

<400> 1953

305

Met Ala Asn Ser Thr Thr Val Thr Glu Phe Ile Leu Leu Gly Leu Ser 1 5 5 5 10 10 15 15 Asp Ala Cys Glu Leu Gln Val Leu Ile Phe Leu Gly Phe Leu Thr 20 25 30 Tyr Phe Leu Ile Leu Leu Gly Asn Phe Leu Ile Ile Phe Ile Thr Leu

```
35
                            40
Ala Asp Arg Arg Leu Tyr Thr Pro Met Tyr Tyr Phe Leu Arg Asn Phe
                        55
                                            60
Ala Met Leu Glu Ile Trp Phe Thr Ser Val Ile Phe Pro Lys Met Leu
                                        75
Thr Asn Ile Ile Thr Gly His Lys Thr Ile Ser Leu Leu Gly Cys Phe
                                    90
Leu Gln Ala Phe Leu Tyr Phe Phe Leu Gly Thr Thr Glu Phe Phe Leu
                                105
Leu Ala Val Met Ser Phe Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu
                            120
Arg Tyr Ala Thr Ile Met Ser Lys Arg Val Cys Val Gln Leu Val Phe
                       135
                                           140
Cys Ser Trp Met Ser Gly Leu Leu Ile Ile Val Pro Ser Ser Ile
                    150
                                       155
Val Phe Gln Gln Pro Phe Cys Gly Pro Asn Ile Ile Asn His Phe Phe
               165
                                    170
Cys Asp Asn Phe Pro Leu Met Glu Leu Ile Cys Ala Asp Thr Ser Leu
                                185
Val Glu Phe Leu Gly Phe Val Ile Ala Asn Phe Ser Leu Leu Gly Thr
                            200
Leu Ala Val Thr Ala Thr Cys Tyr Gly His Ile Leu Tyr Thr Ile Leu
                        215
                                            220
His Ile Pro Ser Ala Lys Glu Arg Lys Lys Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Ile Ile Val Val Ser Leu Phe Tyr Gly Ser Cys Ile Phe Met
                245
                                    250
Tyr Val Arg Ser Gly Lys Asn Gly Gln Gly Glu Asp His Asn Lys Val
                                265
Val Ala Leu Leu Asn Thr Val Val Thr Pro Thr Leu Asn Pro Phe Ile
                            280
                                                285
Tyr Thr Leu Arg Asn Lys Gln Val Lys Gln Val Phe Arg Glu His Val
                       295
Ser Lys Phe Gln Lys Phe Ser Gln Thr
305
                    310
<210> 1954
<211> 309
<212> PRT
<213> Mus musculus
<400> 1954
Met Ala Val Gly Asn Ser Ser Ser Val Lys Glu Phe Ile Leu Leu Gly
                                    10
Leu Thr Gln Glu Pro Glu Leu Gln Leu Pro Leu Phe Phe Leu Phe Leu
                                25
```

```
Ile Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Lys Pro
       115
                            120
Leu Leu Tyr Gln Val Thr Met Ser His Gln Val Cys Leu Leu Met Thr
                       135
                                           140
Val Gly Met Tyr Val Met Gly Leu Val Gly Ala Ile Ala His Ile Val
                    150
                                        155
Cys Met Leu Arg Leu Thr Phe Cys Glu Gly His Ile Ile Asn His Tyr
                165
                                    170
Met Cys Asp Ile Pro Pro Leu Leu Lys Leu Ser Cys Thr Ser Thr Tyr
                                185
Ile Asn Glu Leu Val Val Phe Ile Val Val Gly Val Asn Val Ile Val
                            200
Pro Thr Leu Thr Ile Phe Ile Thr Tyr Thr Leu Ile Leu Ser Asn Ile
                        215
                                            220
Leu Ser Ile His Ser Ala Glu Gly Arg Ser Lys Ala Phe Ser Thr Cys
                   230
                                        235
Gly Ser His Val Ile Ala Val Ser Leu Phe Phe Gly Ala Ala Ala Phe
                                    250
Met Tyr Leu Lys Pro Ser Ser Ala Ser Val Asp Glu Glu Lys Leu Ser
            260
                                265
                                                    270
Thr Ile Phe Tyr Thr Ile Val Gly Pro Met Leu Asn Pro Phe Ile Tyr
                            280
Ser Ile Arg Asn Lys Asp Val His Ile Ala Leu Arg Lys Thr Leu Lys
                        295
                                            300
Lys Ser Met Phe Thr
305
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1955

Met Thr Leu Glu Arg Met Ala Phe Ser Asn Asp Ser Ser Val Lys Glu Phe Ile Leu Leu Gly Leu Thr Gln Gln Pro Glu Leu Gln Met Pro Leu 25 Phe Phe Leu Phe Leu Gly Ile Tyr Val Val Ser Met Val Gly Asn Leu 40 Gly Leu Ile Val Leu Ile Val Leu Asn Pro His Leu His Thr Pro Met 55 Tyr Tyr Phe Leu Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Ser 70 75 Val Ile Thr Pro Lys Met Leu Val Gly Phe Val Lys Gln Asn Ile Ile 85 90 Ser His Ala Glu Cys Met Thr Gln Leu Phe Phe Phe Ser Phe Phe Val 100 105 Ile Asp Glu Cys Tyr Ile Leu Thr Ala Met Ala Tyr Asp Arg Tyr Ala 120 Ala Ile Cys Lys Pro Leu Leu Tyr Gln Val Thr Met Ser Tyr Gln Val 135 140 Cys Leu Leu Met Thr Gly Gly Met Tyr Val Met Gly Leu Val Gly Ala 150 155 Ile Ala His Ile Val Cys Met Leu Arg Leu Thr Phe Cys Glu Gly Tyr 165 170 Ile Ile Asn His Tyr Met Cys Asp Ile Pro Pro Leu Leu Lys Leu Ser

180 185 Cys Thr Ser Thr Tyr Ile Asn Glu Leu Val Val Phe Ile Val Val Gly 200 Val Asn Val Ile Val Pro Thr Leu Thr Ile Phe Ile Ser Tyr Thr Leu 215 Ile Leu Ser Asn Ile Leu Ser Ile His Ser Ala Glu Gly Arg Ser Lys 230 235 Ala Phe Arg Thr Cys Gly Ser His Phe Ile Ala Val Ser Leu Phe Tyr 245 250 Gly Ala Ser Ala Phe Met Tyr Leu Lys Pro Ser Ser Ala Ser Val Asp 265 260 Asp Asp Lys Ile Ser Thr Ile Phe Tyr Ile Ile Val Gly Pro Met Leu 280 Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Val His Ile Ala Leu 295 300 Arg Lys Thr Leu Lys Lys Ser Thr Phe Ile

<210> 1956

<211> 313

<212> PRT

<213> Mus musculus

<400> 1956

Met Lys Gln Met Ala Thr Glu Asn Asp Ser Ser Val Ser Glu Phe Ile 10 Leu Leu Gly Leu Thr Asp Gln Pro Glu Leu Gln Leu Pro Leu Phe Ala 25 Leu Phe Leu Leu Asn Tyr Thr Ala Thr Met Val Gly Asn Leu Thr Leu 40 Met Ser Leu Ile Leu Val His Ser Asn Leu His Thr Pro Met Tyr Phe 55 60 Phe Ile Phe Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Phe Val Phe 70 75 Thr Pro Lys Met Leu Met Lys Phe Phe Leu Glu Lys Asn Thr Ile Ser 85 90 Phe Lys Gly Cys Met Thr Gln Leu Phe Phe Phe Cys Phe Phe Val Asn 105 Thr Glu Ser Tyr Val Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala 125 120 Ile Cys Lys Pro Leu Leu Tyr Gln Ala Ile Met Leu Pro Arg Ile Cys 135 140 Cys Leu Leu Met Phe Met Ser Tyr Leu Met Gly Phe Val Ser Ala Met 150 155 Ile Leu Thr Gly Leu Met Phe Arg Leu Asn Phe Cys Asn Ser Asn Ile 165 170 Ile Asn His Tyr Met Cys Asp Ile Phe Pro Leu Leu Gln Ile Ser Cys 180 185 Ser Asp Thr Tyr Leu Asn Glu His Val Ser Ser Ala Val Val Gly Thr 200 Ala Ile Ile Leu Cys Ser Leu Leu Ile Leu Met Ser Tyr Ala Leu Ile 215 Leu Phe Asn Ile Leu Asn Met Ser Ser Gly Lys Gly Trp Ser Lys Ala 230 235 Leu Gly Thr Cys Gly Ser His Ile Ile Thr Ala Ser Leu Phe Tyr Gly 245 250

 Ser Gly Leu Leu Ala Tyr Val Lys
 Lys Pro Ser Ser Pro Glu Thr Val Gly 260

 Gln Gly Lys Phe Leu Thr Val Phe Tyr Thr Cys Leu Val Pro Val Leu 275

 Asn Pro Leu Ile Tyr Ser Leu Pro Asn Lys Asp Val Lys Ile Ala Met 290

 Lys Lys Thr Leu Lys Arg Ile Thr Ser 310

<210> 1957 <211> 331 <212> PRT <213> Mus musculus

<400> 1957

Met Leu Leu Gln Met Gln His Met Lys Gln Met Asn Met Glu Asn Asp 10 Ser Ser Val Ser Glu Phe Ile Leu Met Gly Leu Thr Tyr Gln Pro Glu 25 Leu Arg Trp Pro Leu Phe Val Leu Phe Leu Val Asn Tyr Ser Ala Thr 40 Val Met Gly Asn Leu Ser Leu Met Thr Leu Ile Phe Leu Asn Ser His 55 Leu His Thr Pro Met Tyr Phe Phe Ile Leu Asn Leu Ser Phe Ile Asp 70 75 Phe Cys. Tyr Ser Phe Asp Phe Thr Pro Lys Met Leu Met Gly Phe Val 85 90 Ser Glu His Asn Thr Ile Ser Phe Thr Gly Cys Met Thr Gln Leu Phe 100 105 110 Phe Phe Cys Leu Phe Val Asn Ser Glu Cys Tyr Val Leu Thr Ala Met 120 Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg Pro Leu Leu Tyr Thr Val 135 140 Val Met Ser Pro Arg Ala Cys Ser Leu Leu Met Leu Ala Ala His Leu 155 Met Gly Val Ser Ser Ala Ile Val His Thr Gly Cys Ile Ile Gln Leu 165 170 Arg Phe Cys Gly Ser Lys Val Ile Asn His Tyr Met Cys Asp Thr Phe 185 Pro Leu Leu Glu Leu Ser Cys Gly Ser Ser His Val Asn Glu Leu Val 200 Ser Ser Val Ser Val Ala Val Val Val Ile Ser Ser Leu Ile Ile 220 215 Val Ser Ser Tyr Ala Leu Ile Leu Val Asn Val Met His Leu Ser Ser 230 235 Ser Lys Gly Trp Ser Lys Ala Val Ser Thr Cys Ser Ser His Ile Ile 245 250 Thr Val Ala Leu Phe Tyr Gly Phe Gly Leu Leu Ala His Ile Lys Pro 265 Ser Ser Ala Glu Ser Val Val Glu Arg Lys Phe Phe Ser Val Val Tyr 280 285 Thr Phe Val Leu Pro Leu Leu Asn Pro Leu Ile Tyr Ser Leu Arg Asn 295 Lys Asp Val Lys Leu Ala Leu Lys Arg Thr Leu Lys Arg Val Thr Ile 310 315 Gln Gly Lys Cys Leu Cys Cys Ser His Lys Ser

325 330

<210> 1958

<400> 1959

```
<211> 316
<212> PRT
<213> Mus musculus
<400> 1958
Met Ala Thr Gly Asn His Tyr Ser Val Thr Glu Phe Ile Leu Thr Gly
                                   10
Leu Thr Glu Gln Pro Glu Leu Gln Met Pro Leu Phe Phe Leu Phe Leu
          20
                               25
Val Asn Cys Leu Ile Thr Val Val Gly Asn Leu Ser Leu Met Ser Leu
                           40
Ile Cys Cys Asn Ser Asn Leu Gln Thr Pro Met Tyr Phe Phe Leu Phe
                       55
Asn Leu Ser Phe Ile Asp Phe Cys Tyr Ser Phe Ala Phe Thr Pro Lys
                    70
                                        75
Thr Leu Met Ser Phe Val Leu Glu Lys Asn Ile Ile Tyr Phe Thr Gly
Cys Met Thr Gln Leu Phe Phe Met Cys Leu Phe Ala Asn Ser Glu Cys
                               105
Tyr Leu Val Thr Ala Met Asp Tyr Asp His Tyr Val Ala Ile Cys Gln
                           120
Pro Leu Leu Tyr Met Ile Ile Thr Ser Pro Met Thr Cys Ser Leu Met
                       135
                                            140
Met Phe Gly Ser Tyr Leu Met Gly Gly Ile Gly Ala Ile Val His Thr
                   150
                                       155
Gly Cys Met Ile Arg Leu Asn Phe Cys Gly Ser Asn Ile Ile Asn His
                                  170
               165
Tyr Met Tyr Asp Ile Phe Pro Leu Leu Gln Leu Ser Cys Ser Ser Ile
                               185
Tyr Ala Asn Glu Leu Val Ser Ser Val Phe Val Ser Thr Val Val Leu
                            200
Ala Ser Ser Phe Leu Ile Leu Thr Ser Tyr Ala Leu Ile Leu Phe Asn
                       215
                                            220
Ile Thr Gln Leu Ser Gly Lys Gly Leu Ser Lys Ala Met Ser Thr Cys
                   230
                                       235
Ser Ser His Ile Met Thr Val Val Leu Phe Tyr Gly Phe Ala Met Leu
               245
                                   250
Thr His Val Lys Thr Ser Ser Asp Glu Ser Val Asn Gln Gly Asn Phe
                               265
Phe Cys Leu Phe Cys Thr Phe Leu Val Pro Leu Leu Asn Pro Phe Ile
                           280
                                  285
Tyr Ser Leu Arg Asn Lys Glu Val Lys Leu Ala Leu Lys Arg Thr Leu
                       295
Arg Arg Leu Thr Val Ser Glu Ser Leu Gly Leu Pro
                    310
<210> 1959
<211> 312
<212> PRT
<213> Mus musculus
```

```
Met Val Asn Gln Ser Ser Pro Val Gly Phe Leu Leu Gly Phe Ser
                                   10
Glu His Pro Gln Leu Glu Lys Val Leu Phe Val Ile Val Leu Cys Ser
                               25
Tyr Leu Leu Thr Leu Leu Gly Asn Thr Leu Ile Leu Leu Ser Thr
Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu Ser Asn Leu
                       55
Ser Phe Leu Asp Leu Cys Phe Thr Thr Thr Cys Val Pro Gln Met Leu
Phe Asn Leu Trp Gly Pro Ala Lys Thr Ile Ser Phe Leu Gly Cys Ser
                                   90
               85
Val Gln Leu Phe Ile Phe Leu Ser Leu Gly Thr Thr Glu Cys Ile Leu
           100
                               105
Leu Thr Val Met Ser Phe Asp Arg Tyr Val Ala Val Cys Gln Pro Leu
                           120
                                               125
His Tyr Ala Thr Val Ile His Pro Arg Leu Cys Trp Lys Leu Ala Ala
                       135
                                           140
Val Ala Trp Met Met Gly Leu Leu Gln Ser Ile Val Gln Thr Pro Pro
                    150
                                        155
Thr Leu Lys Leu Pro Phe Cys Pro His Arg Gln Ile Asp Asp Phe Leu
               165
                                   170
                                                        175
Cys Glu Val Pro Ser Leu Ile Arg Leu Ser Cys Gly Asp Thr Thr Phe
                               185
Asn Glu Ile Gln Leu Ala Val Ser Ser Val Ile Leu Val Val Pro
                           200
                                                205
Leu Ser Leu Ile Leu Val Ser Tyr Gly Ala Ile Ala Arg Ala Val Met
                       215
Arg Ile Asn Ser Thr Glu Ala Trp Lys Lys Ala Leu Arg Thr Cys Ser
                   230
                                       235
Ser His Leu Ile Val Val Thr Leu Phe Tyr Ser Ser Val Ile Ala Val
                                   250
Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Gln Glu Arg Gly Lys Phe Phe
                               265
            260
Gly Leu Phe Tyr Ala Val Gly Thr Pro Thr Leu Asn Pro Leu Ile Tyr
                            280
Thr Leu Arg Asn Lys Glu Val Lys Arg Ala Phe Trp Arg Leu Leu Gly
                       295
Lys Asp Gly Asp Ser Lys Asn Thr
```

```
<210> 1960
<211> 310
<212> PRT
```

<213> Mus musculus

<400> 1960

 Met
 Val
 Asn
 Gln
 Ser
 Ser
 Pro
 Val
 Gly
 Phe
 Leu
 Leu
 Leu
 Gly
 Phe
 Ser
 Leu
 Leu
 Leu
 Leu
 Cys
 Ser

 Glu
 His
 Pro
 Gln
 Leu
 Glu
 Lys
 Val
 Leu
 Phe
 Val
 Val
 Val
 Leu
 Cys
 Ser

 Tyr
 Leu
 Leu
 Thr
 Leu
 Gly
 Asn
 Thr
 Leu
 Leu
 Leu
 Ser
 Thr

 Jan
 Asp
 Pro
 Arg
 Leu
 His
 Ser
 Pro
 Met
 Tyr
 Phe
 Phe
 Leu
 Ser
 Asn
 Leu

 Ser
 Phe
 Leu
 Asp
 Leu
 Cys
 Phe
 Thr
 Thr
 Thr
 Cys
 Val
 Pro
 Gln
 Met
 Leu

 Ser
 Phe
 Leu
 Thr
 Thr
 Thr
 Thr
 Cys
 Val
 Pro
 Gln
 Met
 Leu

 Ser
 Phe
 Leu
 Thr
 T

```
65
                    70
                                        75
Phe Asn Leu Trp Gly Pro Ala Lys Thr Ile Ser Phe Leu Gly Cys Phe
                                    90
Val Gln Leu Phe Ile Phe Leu Ser Leu Gly Thr Thr Glu Cys Ile Leu
                                105
Leu Ala Val Met Ser Phe Asp Arg Tyr Val Ala Val Cys Gln Pro Leu
                            120
                                                125
His Tyr Ala Thr Val Ile His Pro Arg Leu Cys Cys Gln Leu Ala Ala
                       135
                                           140
Val Ala Trp Thr Ile Gly Leu Val Glu Ser Val Val Gln Thr Pro Ser
                   150
                                        155
Thr Leu Arg Leu Pro Phe Cys Pro His His Gln Val Asp Asp Phe Val
               165
                                   170
Cys Glu Val Pro Ala Leu Ile Arg Leu Ser Cys Gly Asp Thr Thr Tyr
                                185
           180
Asn Glu Ile Gln Met Ala Ile Ala Ser Val Phe Ile Leu Val Val Pro
                            200
Leu Ser Leu Ile Leu Val Ser Tyr Gly Ala Ile Ala Arg Ala Val Leu
                        215
Arg Ile Ser Ser Ala Lys Gly Arg Arg Lys Ala Phe Gly Thr Cys Ser
                    230
                                        235
Ser His Leu Ile Val Val Thr Leu Phe Tyr Ser Ser Val Ile Ala Val
                                    250
                245
Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Arg Glu Arg Gly Lys Phe Phe
                                265
Gly Leu Phe Tyr Ala Val Gly Thr Pro Ser Leu Asn Pro Leu Ile Tyr
                            280
Thr Leu Arg Asn Lys Glu Val Lys Arg Ala Phe Arg Arg Leu Leu Trp
                       295
Lys Glu Val Lys Pro Gly
```

<211> 314

<212> PRT

<213> Mus musculus

<400> 1961

Met Gly Lys Asn Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr 10 Gln Asp Pro Val Gly Gln Lys Ala Leu Phe Val Leu Phe Leu Leu Met 25 Tyr Ile Val Thr Met Ala Gly Asn Leu Ile Ile Val Val Thr Ile Ile 40 4.5 Ala Ser Pro Ser Leu Ser Ser Pro Met Tyr Phe Phe Leu Ala Tyr Leu 55 Ser Leu Met Asp Ala Ile Tyr Ser Thr Ala Ile Ser Pro Lys Leu Ile 75 Met Asp Leu Cys Asn Lys Lys Thr Ile Ser Phe Arg Ala Cys Met 85 90 Gly Gln Leu Phe Val Glu His Leu Phe Gly Ala Thr Glu Ile Phe Leu 105 Leu Val Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Leu Thr Ile Met Asn His Arg Val Cys Ile Leu Leu Val Met 130 135 140

```
Ala Thr Trp Val Gly Gly Phe Ala His Ser Met Ala Gln Val Leu Phe
                    150
                                        155
Val Tyr Asp Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ala
                165
                                    170
Cys Asp Met Tyr Pro Leu Leu Val Leu Val Cys Ser Asp Thr Tyr Phe
                                185
Leu Gly Leu Thr Val Ile Ala Asn Asp Gly Ala Ile Cys Met Val Val
                            200
                                                205
Phe Val Ile Leu Leu Ala Ser Tyr Gly Ile Ile Leu Asn Ser Leu Lys
                       215
Thr His Ser Gln Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ser Ser
                                        235
                    230
His Ile Met Val Val Ile Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
               245
                                    250
Val Arg Pro Val Ser Asn Phe Pro Val Asp Lys Ser Val Thr Ile Phe
           260
                                265
Tyr Thr Val Val Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                            280
                                                285
Asn Ser Glu Ile Lys His Ser Met Leu Lys Leu Trp Ser Lys Ile Leu
                        295
His Ser Asp Arg Leu Arg Lys Ser Cys Cys
                    310
```

<211> 302

<212> PRT

<213> Mus musculus

<400> 1962

Met Asp Ser Pro Arg Asn Val Thr Glu Phe Phe Met Leu Gly Leu Ser Gln Asn Pro Gln Val Gln Arg Met Leu Phe Gly Leu Phe Leu Leu Val Phe Leu Val Ser Val Gly Gly Asn Met Leu Ile Ile Ile Thr Ile Thr Phe Ser Pro Thr Leu Gly Ser Pro Met Tyr Phe Phe Leu Ser Tyr Leu 55 Ser Phe Ile Asp Thr Cys Tyr Ser Ser Cys Met Thr Pro Lys Leu Ile 75 Ala Asp Ser Leu His Glu Gly Arg Ala Ile Ser Phe Glu Gly Cys Leu 85 90 Ala Gln Phe Phe Val Ala His Leu Leu Gly Gly Thr Glu Ile Ile Leu 100 105 110 Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Thr Thr Met Thr Arg His Val Cys Ile Val Leu Val Ala 135 140 Val Ala Trp Leu Gly Gly Ile Leu His Ser Thr Ala Gln Leu Phe Leu 150 155 Val Leu Gln Leu Pro Phe Cys Gly Pro Asn Val Ile Asn His Phe Val 170 165 Cys Asp Leu Tyr Pro Leu Leu Glu Leu Ala Cys Thr Asp Thr Tyr Val 185 Ile Gly Leu Leu Val Val Ala Asn Ser Gly Val Ile Cys Leu Leu Asn 200 205 Phe Leu Met Leu Ala Ala Ser Tyr Ile Val Ile Leu Arg Thr Leu Arg

```
210
                      215
Ser His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly Ala
           230
                                      235
His Phe Thr Val Val Ala Leu Phe Phe Val Pro Cys Ile Phe Ile Tyr
               245
                                   250
Met Arg Pro Ser Ser Thr Leu Ser Ile Asp Lys Ile Val Ala Val Phe
                               265
Tyr Cys Ile Leu Thr Pro Met Phe Asn Pro Leu Ile Tyr Thr Leu Arg
                          280
Asn Ala Glu Val Lys Asn Ala Met Lys Asn Leu Trp Arg Lys
<210> 1963
<211> 306
<212> PRT
<213> Mus musculus
<400> 1963
Met Ser Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Gln Asp Pro
Asp Leu Gln Lys Phe Leu Phe Ile Val Cys Leu Ile Ile Tyr Leu Ile
           20
                               2.5
Thr Leu Ala Gly Asn Met Leu Ile Ser Val Thr Ile Phe Ile Ser Pro
                           40
Ala Leu Ala Thr Pro Met Tyr Phe Phe Leu Ser Tyr Leu Ser Val Ile
                       55
Asp Gly Phe Tyr Ser Ser Ser Ile Ala Pro Lys Met Ile Tyr Asp Leu
                   70
                                       75
Ile Ser Glu Lys Ser Thr Ile Ser Phe Asn Gly Cys Met Thr Gln Leu
               85
                                   90
Phe Val Glu His Phe Phe Ala Ala Glu Ile Ile Leu Leu Met Ser
                               105
Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Met
       115
                           120
Thr Ile Met Asn Arg Pro Leu Cys Val Phe Leu Val Gly Ala Ala Val
                       135
                                           140
Ile Leu Gly Phe Ile His Gly Gly Ile Gln Ile Leu Phe Met Ala Gln
                  150
                                      155
Leu Pro Phe Cys Gly Pro Asn Ile Ile Asp His Phe Met Cys Asp Leu
               165
                                  170
```

Ile Pro Leu Leu Glu Leu Ala Cys Thr Asp Thr His Thr Leu Gly Pro 185 Leu Ile Ala Ala Asn Ser Gly Ser Leu Cys Leu Leu Ile Phe Ser Met 200

Leu Val Ala Ser Tyr Val Val Ile Leu Arg Ser Leu Arg Asn His Ser

Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ala Ser His Val Thr

Val Val Leu Phe Phe Val Pro Cys Ser Tyr Leu Tyr Leu Arg Pro

Met Thr Ser Phe Pro Thr Asp Lys Ala Val Thr Val Phe Cys Thr Leu 265 Val Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg Asn Glu Glu 280

Val Lys Arg Val Met Lys Lys Leu Trp Gly Arg Met Arg Lys Ala Gly

215

230

245

205

285

235

250

<211> 318 <212> PRT

<213> Mus musculus

```
<211> 311
<212> PRT
<213> Mus musculus
<400> 1964
Met Gly Asn Phe Asn Thr Ser Thr Gln Glu Ser Phe Ile Leu Val Gly
                                   10
Phe Ser Asp Trp Pro Gln Leu Gln Ala Phe Leu Phe Val Ile Ile Leu
                               25
Ile Phe Tyr Ser Leu Thr Ile Phe Gly Asn Thr Thr Ile Ile Val Leu
                           40
Ala Arg Leu Asp Leu Arg Leu His Lys Pro Met Tyr Phe Phe Leu Ser
                       55
His Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln
Leu Leu Ile Asn Leu Arg Gly Leu Asp Arg Thr Ile Ser Tyr Gly Gly
               85
                                   90
Cys Val Ala Gln Leu Phe Ile Phe Leu Ala Leu Ala Ser Thr Glu Cys
                               105
Leu Ile Leu Val Ala Met Ala Phe Asp Arg Tyr Ala Ala Val Cys His
       115
                           120
Pro Leu His Tyr Thr Ser Ile Met Asn Pro Ile Leu Cys Arg Ala Leu
                       135
Ala Ile Ser Ser Trp Val Gly Gly Leu Val Asn Ser Leu Ile Gln Thr
                  150
                                      155
Gly Leu Val Met Ala Met Arg Leu Cys Gly His Gln Ile Asn His Phe
                                   170
Phe Cys Glu Met Pro Ile Phe Leu Lys Leu Ala Cys Glu Asp Thr Glu
                               185
Gly Thr Glu Ala Lys Met Phe Val Ala Arg Thr Ile Val Leu Val Cys
                           200
Pro Ala Val Leu Ile Leu Gly Ser Tyr Val His Ile Ala Lys Ala Val
                       215
                                           220
Leu Lys Val Lys Ser Met Ala Gly Arg Arg Lys Ala Phe Gly Thr Cys
                   230
                                       235
Gly Ser His Leu Met Val Val Ser Leu Phe Tyr Gly Ser Gly Ile Tyr
               245
                                   250
Thr Tyr Leu Gln Pro Val His Arg Tyr Ser Glu Ser Lys Gly Lys Phe
                               265
           260
Val Ala Leu Phe Tyr Thr Ile Val Thr Pro Met Phe Asn Pro Leu Ile
                           280
Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Trp Lys Leu Leu
                       295
Gly Arg Gly Thr Asp Ser Gly
<210> 1965
```

```
<400> 1965
Met Gly Ser Phe Asn Leu Ser Leu Glu Gly Phe Leu Leu Val Gly Phe
                 5
                                    10
Ser Asp Trp Pro Gln Leu Glu Leu Ile Leu Leu Val Phe Ile Ser Ile
                                25
Phe Tyr Ser Leu Thr Leu Cys Gly Asn Ile Thr Ile Ile Val Leu Thr
Gln Gln Asp Leu His Leu His Thr Pro Met Tyr Phe Phe Leu Ala His
                        55
Leu Ser Phe Leu Asp Leu Cys Phe Thr Ser Ser Thr Val Pro Lys Leu
                                        75
Leu Ile Ser Leu Ser Arg Gly Asp Gln Thr Ile Ser Tyr Ala Gly Cys
               85
                                    90
Met Thr Gln Phe Phe Ile Ala Leu Leu Gly Gly Thr Glu Cys Val
                                105
           100
                                                    110
Leu Leu Val Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Arg Pro
                           120
Leu His Tyr Thr Ser Ile Met His Pro Leu Leu Cys His Ala Leu Ala
                        135
                                            140
Ile Ser Ser Trp Val Gly Gly Leu Val Asn Ser Leu Thr Gln Thr Ser
                    150
                                        155
Leu Ile Met Thr Ile Pro Leu Cys Gly His His Leu Asn His Phe Phe
                165
                                    170
Cys Glu Met Leu Val Leu Leu Lys Leu Ala Cys Glu Asp Thr Val Gly
                                185
Thr Glu Thr Tyr Leu Phe Trp Ala Gly Ala Val Ile Leu Val Cys Pro
                            200
Val Ala Leu Ile Leu Gly Thr Tyr Ala His Ile Ala His Ala Val Leu
                        215
                                            220
Lys Ile Lys Ser Arg Ser Gly Arg Arg Lys Ala Leu Gly Thr Cys Gly
                    230
                                        235
Ser His Leu Thr Val Val Phe Leu Phe Tyr Gly Ser Ala Met Tyr Thr
                245
                                    250
Tyr Leu Gln Pro Ile His Thr Tyr Ser Gly Ser Glu Gly Lys Phe Ala
                                265
Ala Leu Phe Tyr Thr Ile Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr
                            280
Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Cys Lys Val Leu Val
                       295
Lys Gly Lys Lys Glu Thr Lys Thr Arg Arg Lys Met Val Glu
                    310
<210> 1966
<211> 311
<212> PRT
<213> Mus musculus
<400> 1966
Met Gly Thr Phe Asn Thr Ser Leu Gly Gly Gly Phe Ile Leu Val Gly
1
                                    10
Phe Ser Asp Trp Pro Ala Leu Glu Leu Ile Phe Phe Ile His Ile Leu
```

Ile Phe Tyr Ser Ile Thr Leu Phe Gly Asn Thr Ala Ile Ile Ala Leu 35 40 45 Ser Arg Thr Asp Leu Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser

```
His Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Ser Thr Val Pro Gln
                                        75
Leu Leu Ile Asn Leu His Gly Gln Asp Arg Thr Ile Ser Tyr Gly Gly
                                    90
Cys Val Ala Gln Leu Phe Ile Phe Leu Ala Leu Gly Ser Thr Glu Ser
                                105
Val Leu Leu Val Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Arg
                            120
Pro Leu His Tyr Thr Thr Ile Met His Pro Val Leu Cys Gln Ala Leu
                       135
Ala Ile Ala Ser Trp Val Gly Gly Phe Leu Asn Ser Leu Ile Gln Thr
                                        155
                   150
Gly Leu Met Met Ala Met Pro Leu Cys Gly His Arg Leu Asn His Phe
                165
                                    170
Phe Cys Glu Met Pro Val Phe Leu Lys Leu Ala Cys Gln Asp Thr Gly
           180
                                185
Gly Thr Glu Ala Lys Met Phe Val Ala Arg Val Val Ile Val Ala Val
                            200
Pro Ala Met Leu Ile Leu Gly Ser Tyr Ala Gln Ile Ala Arg Ala Val
                        215
Leu Lys Val Lys Ser Val Ala Ala Arg Arg Lys Ala Ala Gly Thr Cys
                    230
                                        235
Gly Ser His Leu Leu Val Val Ser Leu Phe Tyr Gly Ser Ala Thr Tyr
                245
                                    250
Thr Tyr Leu Gln Pro Lys Asp Ser Tyr Ser Glu Ser Lys Gly Lys Phe
                                265
Val Ala Leu Phe Tyr Thr Ile Ile Thr Pro Met Phe Asn Pro Leu Ile
                           280
Tyr Thr Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Trp Lys Val Leu
                        295
Gly Arg Ala Ala Ala Thr Gly
305
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1967

Met Glu Ser Phe Asn Ile Ser Leu Gly Lys Gly Phe Ile Leu Val Gly 10 Phe Ser Asp Trp Pro Ala Leu Glu Leu Ile Phe Phe Ile Tyr Ile Leu 25 Ile Phe Tyr Ser Leu Thr Leu Phe Gly Asn Thr Ala Ile Ile Ala Leu 40 Ser Arg Met Asp Leu Gln Leu His Thr Pro Met Tyr Tyr Phe Leu Cys 55 His Leu Ser Phe Leu Asp Leu Cys Phe Thr Thr Ser Thr Val Pro Gln Leu Leu Ile Asn Leu His Gly Gln Asp Arg Thr Ile Ser Tyr Gly Gly 85 90 Cys Val Ser Gln Leu Phe Ile Thr Leu Ala Leu Gly Ser Thr Glu Ser 105 Val Leu Leu Val Val Met Ala Phe Asp Arg Tyr Ala Ala Val Cys Arg 120 Pro Leu His Tyr Met Asn Ile Met His Pro Val Leu Cys Gln Ala Leu

```
135
   130
                                           140
Ala Ile Ala Ser Trp Val Gly Gly Phe Leu Asn Ser Leu Ile Gln Thr
                   150
                                      155
Gly Leu Met Met Ala Met Pro Leu Cys Gly His Arg Leu Asn His Phe
               165
                                    170
Phe Cys Glu Met Pro Val Phe Leu Lys Leu Ala Cys Gln Asp Thr Gly
                                185
Gly Thr Glu Ala Lys Met Phe Val Ala Arg Ala Val Ile Val Ala Val
                           200
Pro Ala Met Leu Ile Leu Gly Ser Tyr Ala Gln Ile Ala Arg Ala Val
                       215
                                           220
Leu Lys Val Lys Ser Val Ala Ala Arg Arg Lys Ala Ala Gly Thr Cys
                   230
                                        235
Gly Ser His Leu Leu Val Val Ser Leu Phe Tyr Gly Ser Ala Thr Tyr
                                   250
               245
Thr Tyr Leu Gln Pro Lys Asp Ser Tyr Ser Glu Ser Lys Gly Lys Phe
                               265
Val Ala Leu Phe Tyr Thr Ile Ile Thr Pro Met Phe Asn Pro Leu Ile
                           280
Tyr Thr Leu Arg Asn Lys Asp Met Lys Gly Ala Leu Trp Lys Val Leu
                       295
Gly Arg Ala Ala Ala Thr Gly
```

<211> 311

<212> PRT

<213> Mus musculus

<400> 1968

Met Glu Tyr Leu Asn Thr Ser Ser Glu Glu Gly Phe Ile Leu Val Gly Phe Ser Asp Trp Pro His Leu Glu Pro Thr Leu Phe Ala Phe Ile Ser Ile Phe Tyr Ser Leu Thr Leu Phe Gly Asn Thr Val Ile Ile Leu 40 Ser Arg Leu Asp Leu Arg Leu His Thr Pro Met Tyr Tyr Phe Leu Cys 55 His Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln 75 Leu Leu Val Asn Leu Ser Gly Leu Asp Arg Thr Ile Ser Phe Gly Arg 90 Cys Val Ala Gln Leu Cys Ile Val Leu Ser Leu Gly Gly Thr Glu Cys 105 100 Val Leu Leu Val Ala Met Ala Ile Asp Arg Tyr Ala Ala Val Cys Arg Pro Leu His Tyr Thr Thr Ile Met His Pro Val Leu Cys Arg Ala Leu 135 Val Val Phe Ser Trp Val Gly Gly Leu Val Asn Ser Leu Ile Gln Thr 150 155 Ser Leu Val Met Ala Met Pro Leu Cys Gly His Gln Leu Asn His Phe 165 170 Phe Cys Glu Leu Pro Val Leu Leu Lys Met Ala Cys Glu Asp Thr Gly 185 Gly Thr Glu Val Asn Leu Phe Val Ala Arg Val Ile Ile Leu Val Cys 200

```
Pro Leu Leu Ile Leu Gly Ser Tyr Ala His Ile Ala Arg Ala Val
                       215
                                          220
Leu Asn Ile Arg Ser Met Ala Gly Arg Arg Lys Ala Phe Gly Thr Cys
                                  235
Ala Ser His Leu Ile Val Val Ala Met Phe Tyr Gly Ser Ala Ile Ser
               245
                                   250
Thr Tyr Leu Gln Pro Val His Arg Tyr Ser Glu Lys Glu Gly Lys Phe
           260
                               265
                                                  270
Leu Ala Leu Phe Tyr Thr Ile Ile Thr Pro Met Leu Asn Pro Leu Ile
                          280
Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Trp Lys Val Leu
                      295
Gly Arg Gly Thr Asp Ser Arg
305
```

<210> 1969 <211> 311 <212> PRT <213> Mus musculus

<400> 1969

<400)> 19	969													
Met 1	Gly	Ser	Phe	Asn 5	Ala	Ser	Leu	Gly	Lys 10	Gly	Phe	Ile	Leu	Val 15	Gly
Phe	Ser	Asp	Trp 20	Pro	Gln	Leu	Glu	Leu 25	Ile	Leu	Phe	Ile	Tyr 30	Val	Leu
Ile	Phe	Tyr 35	Ser	Leu	Thr	Leu	Phe 40	Gly	Asn	Thr	Thr	Ile 45	Ile	Ala	Leu
Ser	Gln 50	Leu	Asp	Ile	Arg	Leu 55	His	Thr	Pro	Met	Tyr 60	Phe	Phe	Leu	Ser
His 65	Leu	Ser	Phe	Leu	Asp 70	Leu	Cys	Tyr	Thr	Thr 75	Ser	Thr	Val	Pro	Gln 80
Leu	Leu	Ile	Asn	Ile 85	Ala	Ala	Gln	Asp	His 90	Thr	Ile	Thr	Tyr	Gly 95	Arg
Cys	Val	Ala	Gln 100	Leu	Phe	Ser	Val	Leu 105	Ala	Leu	Gly	Ser	Thr 110	Glu	Ser
Met	Leu	Leu 115	Val	Val	Met	Ala	Phe 120	Asp	Arg	Tyr	Ala	Ala 125	Val	Cys	Arg
Pro	Leu 130	His	Tyr	Thr	Thr	Ile 135	Met	His	Pro	Leu	Leu 140	Cys	Gln	Ala	Leu
Ala 145	Ile	Ser	Ser	Trp	Val 150	Ala	Gly	Leu	Val	Asn 155	Ser	Leu	Ile	Gln	Thr 160
Gly	Leu	Met	Met	Ala 165	Met	Pro	Leu	Cys	Arg 170	Tyr	Arg	Leu	Asn	His 175	Phe
Phe	Cys	Glu	Met 180	Pro	Val	Phe	Leu	Lys 185	Leu	Ala	Cys	Lys	Asp 190	Thr	Ala
Gly	Thr	Glu 195	Ala	Lys	Met	Phe	Val 200	Ala	Arg	Ala	Ile	Ile 205	Leu	Val	Phe
Pro	Ala 210	Thr	Leu	Ile	Leu	Gly 215	Ser	Tyr	Ala	His	Ile 220	Ala	Arg	Ala	Val
Leu 225	Lys	Val	Lys	Ser	Thr 230	Ser	Gly	Arg	Arg	Lys 235	Ala	Phe	Gly	Thr	Cys 240
Gly	Ser	His	Leu	Leu 245	Val	Val	Ser	Met	Phe 250	Tyr	Gly	Ser	Thr	Ile 255	Tyr
Thr	Tyr	Leu	Gln 260	Pro	Asn	Asp	Ser	Tyr 265	Ser	Glu	Asn	Glu	Gly 270	Lys	Phe
Val	Ala	Leu	Phe	Tyr	Thr	Ile	Val	Thr	Pro	Met	Leu	Asn	Pro	Leu	Ile

275 280 Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Trp Lys Val Leu 295 300 Gly Arg Gly Thr Asp Ser Arg <210> 1970 <211> 311 <212> PRT <213> Mus musculus <400> 1970 Met Gly Thr Phe Asn Phe Ser Ser Asp Arq Ala Phe Phe Leu Val Gly Phe Ser Asp Trp Pro His Leu Glu Leu Val Phe Phe Val Ala Ile Ser 25 Ile Phe Tyr Ser Leu Thr Leu Phe Gly Asn Ser Ser Ile Ile Ala Leu Ser Arg Leu Asp Leu Arg Leu Gln Thr Pro Met Tyr Phe Phe Leu Cys 55 His Leu Ser Phe Leu Asp Leu Cys Tyr Thr Thr Ser Thr Val Pro Gln 70 75 Leu Leu Ile Asn Leu His Gly Gln Asp Arg Thr Ile Ser Tyr Glu Arg Cys Val Ala Gln Leu Leu Ile Phe Leu Ala Leu Ala Ser Thr Glu Cys 105 Val Leu Leu Gly Val Met Ala Phe Asp Arg Tyr Ala Ala Val Cys Arg 120 125 Pro Leu His Tyr Thr Thr Ile Met His Pro Gln Leu Cys His Thr Leu 135 140 Ala Ile Ser Ser Trp Val Gly Gly Leu Val Asn Ser Leu Thr Gln Thr 150 155 Gly Leu Met Met Val Met Pro Leu Cys Gly Tyr Arg Leu Asn His Phe 165 170 Phe Cys Glu Met Pro Ile Phe Leu Lys Leu Ala Cys Glu Glu Thr Lys 185 Arg Thr Glu Ala Lys Met Phe Val Ala Arg Thr Ile Val Leu Val Cys 200 Pro Ala Ala Leu Ile Leu Gly Ser Tyr Ala His Ile Thr Arg Ala Val 215 220 Leu Lys Val Lys Ser Thr Ala Gly Arg Arg Lys Ala Phe Gly Thr Cys 230 235 Gly Ser His Ile Leu Val Val Ser Leu Phe Tyr Gly Ser Ala Ile Tyr 245 250 Thr Tyr Leu Gln Pro Thr His Thr Tyr Ser Glu Ser Glu Gly Lys Phe 265 Val Ala Leu Phe Tyr Thr Ile Ile Thr Pro Met Leu Asn Pro Leu Ile 280 Tyr Thr Leu Arg Asn Lys Asp Val Lys Gly Ala Leu Trp Lys Val Leu 295 Gly Arg Gly Thr Asp Ser Glu 305

<210> 1971 <211> 313

<212> PRT <213> Mus musculus <400> 1971 Met Met Gln Trp Asn Asn Trp Thr Arg Asn Ser Asp Phe Ile Leu Leu 20 40 55 70 85 135 150

10 Gly Phe Phe Asp His Ser Pro Leu His Thr Phe Phe Ser Leu Ile 25 Leu Ala Ile Phe Phe Met Ala Leu Ile Gly Asn Ser Val Met Val Ile Leu Ile Tyr Leu Asp Ala Gln Leu His Thr Pro Met Tyr Ile Leu Leu Ser Gln Leu Ser Leu Met Asp Leu Met Leu Ile Ser Thr Thr Val Pro 75 Gln Thr Ala Phe Asn Phe Leu Ser Gly Asn Lys Ser Ile Ser Met Ala 90 Gly Cys Gly Val Gln Ile Phe Phe Tyr Val Ser Leu Leu Gly Ala Glu 105 Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys 120 Tyr Pro Leu Arg Tyr Pro Ile Leu Met Ser His Lys Ile Cys Ser Leu 140 Met Ala Ala Phe Ser Trp Ile Leu Gly Ser Leu Asp Gly Ile Ile Asp 155 Val Ala Ala Val Leu Ser Phe Ser Tyr Cys Gly Thr Arg Glu Ile Pro 165 170 His Phe Phe Cys Asp Ile Pro Ala Leu Leu Thr Ile Ser Cys Ser Asp 180 185 190 Thr Leu Ile Phe Glu Lys Ile Ile Phe Phe Cys Cys Val Ile Met Leu 195 200 205 Ile Phe Pro Val Val Ile Val Ile Ala Ser Tyr Ile Cys Val Ile Leu 215 220 Ala Val Ile Lys Met Ala Ser Ala Glu Ser Arg His Lys Ala Phe Ala 230 235 Thr Cys Ser Ser His Val Met Val Val Ile Tyr Tyr Gly Ala Ala Met Phe Ile Tyr Met Gln Pro Ser Ser Ser Arg Ser Pro Asn Gln Asp 260 265 Lys Leu Val Ser Ala Phe Tyr Thr Ile Leu Thr Pro Leu Leu Asn Pro 280 Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Ala Arg Ala Phe Met Lys 295 300 Val Leu Arg Met Asp Lys Ala Ala Gly

<210> 1972 <211> 320 <212> PRT

<213> Mus musculus

<400> 1972

Met Gln Ile Ser Ser Ser Ile Ile Ser Pro Arg Met Asn Cys Ser Gln Ala Pro Gly Phe Ile Leu Leu Gly Leu Pro Arg Glu Pro Glu Lys Trp 25 Gln His Phe Phe Ile Ile Phe Leu Gly Leu Tyr Leu Leu Gly Leu Leu

```
35
                           40
Gly Asn Leu Leu Leu Leu Ala Ile Gly Ser Asp Val His Leu His
                       55
Thr Pro Met Tyr Phe Phe Leu Ser Gln Leu Ser Leu Val Asp Leu Cys
Phe Ile Thr Thr Thr Ala Pro Lys Thr Leu Glu Thr Trp Trp Thr Gly
Asp Gly Ser Ile Ser Phe Ser Gly Cys Leu Thr Gln Leu Tyr Phe Phe
                               105
Gly Val Phe Ala Asp Met Asp Asn Leu Leu Leu Ala Val Met Ala Ile
                           120
Asp Arg Tyr Ala Ala Ile Cys His Pro Leu Leu Tyr Pro Leu Leu Met
                       135
Thr Pro Cys Arg Cys Glu Val Leu Val Ser Gly Ser Trp Gly Ile Ala
                   150
                                       155
His Cys Val Ser Leu Met Tyr Thr Leu Leu Ser Gln Leu Tyr Phe
               165
                                  170
His Thr Asn Gln Glu Ile Pro His Phe Phe Cys Asp Cys Arg Pro Leu
                               185
Leu Leu Ser Cys Ser Asp Thr His Leu Asn Glu Val Leu Met Met
                           200
Ala Leu Ala Gly Val Leu Gly Val Ser Ala Val Leu Cys Ile Val Ser
                       215
Ser Tyr Gly Cys Ile Phe Tyr Ala Val Ala Arg Val Pro Ser Ala Gln
                   230
                                       235
Gly Lys Arg Lys Ala Leu Thr Thr Cys Ser Ser His Leu Ser Val Val
               245
                                   250
Leu Leu Phe Tyr Ser Thr Val Phe Ala Thr Tyr Leu Lys Pro Pro Ser
                               265
Thr Ser His Ser Ser Gly Glu Val Val Ala Ala Val Met Tyr Thr Leu
                           280
                                               285
Val Thr Pro Thr Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp
                       295
                                           300
Val Lys Ser Ser Leu Arg Arg Val Leu Asn Ile Glu Lys Ser Gln Asp
                   310
                                        315
```

<211> 321

<212> PRT

<213> Mus musculus

<400> 1973

 Met
 Trp
 Ile
 His
 Leu
 Glu
 Phe
 Met
 Glu
 Asn
 His
 Lys
 Asn
 Val
 Thr
 Glu

 Phe
 Ile
 Phe
 Met
 Gly
 Leu
 Trp
 Gln
 Asn
 Arg
 Gln
 Ile
 Glu
 Leu
 Leu
 Phe
 Asn
 Ser
 Asn
 Arg
 Gln
 Ile
 Glu
 Leu
 Leu
 Phe
 Asn
 Ser
 Asn
 Arg
 Ile
 Leu
 Met
 Gly
 Asn
 Ser
 Asn
 Arg
 Leu
 Arg
 Ile
 Ile

```
Ala Gly Val Glu Ile Phe Ile Leu Val Ser Met Ala Leu Asp Arg Tyr
                           120
Val Ala Ile Val Lys Pro Leu His Tyr Met Val Ile Met Ser Arg Lys
                       135
                                           140
Arg Cys Asp Met Leu Ile Val Thr Ala Trp Ile Leu Gly Phe Trp His
                   150
                                       155
Ser Ile Ala Leu Leu Met Val Leu Ser Leu Pro Phe Cys Gly Pro
                                   170
               165
Asn His Ile Asn His Tyr Leu Cys Asp Ile Lys Pro Leu Leu Lys Leu
                              185
Val Cys Lys Asp Val His Val Val Ser Ile Leu Ala Ile Ala Asn Ser
       195
                           200
                                               205
Gly Met Val Leu Phe Ala Ile Phe Ile Val Leu Leu Ala Ser Tyr Ile
                       215
                                           220
Leu Ile Leu Tyr Ser Leu Arg Thr Arg Ser Ser Ala Gly Lys Arg Lys
                   230
                                       235
Ala Leu Ser Thr Cys Ser Ser His Ile Met Val Val Leu Phe Phe
               245
                                   250
Gly Pro Cys Ile Tyr Ile Tyr Ile Leu Pro Ala Gly Ser Glu Asn Lys
                               265
Asp Lys Glu Ile Ser Val Phe Tyr Thr Val Ile Ala Pro Met Leu Asn
                           280
Pro Leu Ile Tyr Thr Leu Arg Asn Ser Glu Met Lys Ser Ala Met His
                      295
                                300
Lys Val Trp Ser Arg Leu Ser Leu Arg Val Glu Val Ser Glu Arg Ile
305
                   310
                                       315
                                                           320
Leu
```

<210> 1974 <211> 309 <212> PRT

<213> Mus musculus

<400> 1974

Met Glu Ile Lys Asn Asn Val Thr Glu Phe Val Leu Leu Gly Leu Thr 1.0 Gln Asn Pro Gln Leu Gln Lys Ile Leu Phe Val Val Phe Leu Val Ile 25 Tyr Val Phe Ser Val Ala Gly Asn Leu Leu Ile Leu Ile Thr Ile Thr 40 Asn Ser Gln Leu Leu Gly Tyr Pro Met Tyr Tyr Phe Leu Ala Tyr Leu 55 60 Ser Phe Ile Asp Ala Cys Tyr Ser Ser Val Asn Thr Pro Lys Leu Leu 70 75 Ala Asp Thr Phe His Lys Arg Lys Ser Ile Lys Phe Asn Gly Cys Met 90 Thr Gln Val Phe Ala Glu His Phe Ile Gly Gly Thr Glu Val Ile Leu 105 Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Ala Thr Ile Met Asn Arg Arg Leu Cys Asn Ile Leu Val Gly 135 140 Val Ser Trp Val Gly Gly Phe Leu His Gly Gly Ile Gln Ile Leu Phe 150 155 Ile Ile Gly Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Met

165 170 Cys Asp Leu Asn Pro Leu Leu Asp Leu Ala Cys Ile Asp Thr His Ile 180 185 Leu Gly Leu Phe Val Ala Ala Asn Ser Gly Phe Ile Cys Leu Leu Asn 200 205 Phe Leu Leu Leu Val Ser Tyr Leu Val Ile Leu Asn Ser Leu Arg Ser His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Val Ser 235 230 His Ile Thr Val Val Val Leu Phe Phe Val Leu Cys Ile Phe Val Tyr 245 250 Met Arg Pro Ala Ala Thr Leu Pro Ile Asp Lys Ala Val Ala Leu Phe 265 270 Tyr Thr Met Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg 280 Asn Ala Gln Met Lys Asn Ala Ile Trp Lys Leu Phe Ser Val Lys Val 295 Gln Ser Asp Asp Lys 305

<210> 1975

<211> 309 <212> PRT

<213> Mus musculus

<400> 1975

Met Glu Ile Lys Asn Asn Val Thr Glu Phe Val Leu Leu Gly Leu Thr 10 Gln Asn Leu His Leu Gln Lys Ile Val Phe Val Val Phe Leu Val Ile 20 25 Tyr Val Phe Ser Val Val Gly Asn Leu Leu Ile Val Ile Thr Ile Thr Asn Ser Gln Leu Gly Tyr Pro Met Tyr Tyr Phe Leu Ala Tyr Leu 55 Ser Phe Ile Asp Ala Cys Tyr Ser Ser Val Asn Thr Pro Lys Val Ile 75 Ala Asp Ser Leu His Lys Arg Lys Ser Ile Lys Phe Asn Gly Cys Met 85 90 Thr Gln Val Phe Ala Glu His Phe Ile Gly Gly Thr Glu Val Ile Leu 105 Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 His Tyr Ala Thr Ile Met Asn Arg Gln Leu Cys Asn Ile Leu Val Gly 140 135 Val Ser Trp Val Gly Gly Phe Leu His Gly Gly Ile Gln Ile Leu Phe 150 155 Ile Ile Gly Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Met 170 Cys Asp Leu Asn Pro Leu Leu Asp Leu Ala Cys Ile Asp Thr His Ile 185 Leu Gly Leu Phe Val Ala Ala Asn Ser Gly Phe Ile Cys Leu Leu Asn 200 205 Phe Leu Leu Leu Val Ser Tyr Leu Val Ile Leu Asn Ser Leu Arg 215 220 Ser His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Val Ser 230 235

His Ile Thr Val Val Leu Phe Phe Val Pro Cys Ile Phe Val Tyr 245 250 Met Arg Pro Val Ala Thr Leu Pro Ile Asp Lys Ala Val Thr Leu Phe 265 Tyr Thr Met Ile Thr Pro Met Leu Asn Pro Leu Ile Tyr Thr Leu Arg 280 Asn Ala Gln Met Lys Asn Ala Ile Trp Lys Leu Phe Ser Val Lys Val 295 Gln Ser Asp Asp Lys 305

<210> 1976 <211> 310 <212> PRT

<213> Mus musculus

Val Ser Asp Asp Arg Lys

<400> 1976 Met Trp Leu Asn Asn Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr Gln Asp Pro Phe Arg Lys Lys Ile Leu Phe Val Val Phe Leu Leu Phe 25 Tyr Met Gly Thr Leu Leu Gly Asn Leu Leu Ile Ile Ala Thr Ile Lys 40 Thr Ser Gln Thr Leu Gly Ser Pro Met Tyr Phe Phe Leu Phe Tyr Leu 55 Ser Leu Ser Asp Thr Cys Phe Ser Thr Thr Ile Ala Pro Arg Thr Ile 70 75 Val Asp Ser Leu Leu Asn Glu Ala Ser Ile Ser Phe Thr Glu Cys Ile 90 85 Ile Gln Val Phe Thr Phe His Phe Gly Cys Leu Glu Ile Phe Ile 105 Leu Ile Leu Met Ala Val Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu 120 125 His Tyr Met Thr Ile Met Ser Arg Arg Val Cys Gly Val Leu Val Ala 135 140 Ile Ala Trp Val Gly Ser Cys Val His Ser Leu Val Gln Ile Phe Leu 150 155 Ala Leu Ser Leu Pro Phe Cys Gly Pro Asn Glu Ile Asp His Tyr Phe 165 170 Cys Asp Leu Gln Pro Leu Leu Lys Leu Ala Cys Ser Asp Thr Tyr Leu 180 185 190 Ile Asn Leu Leu Val Ser Asn Ser Gly Ala Ile Cys Thr Val Ser 195 200 Phe Leu Met Leu Ile Val Ser Tyr Val Ile Ile Leu Arg Ser Leu Arg 215 220 Asn His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ile Ser 230 235 His Ile Ile Val Val Ile Leu Phe Phe Gly Pro Cys Ile Phe Ile Tyr 250 Thr Arg Pro Ala Thr Thr Phe Pro Met Asp Lys Met Ile Ala Ile Phe 265 Tyr Ser Ile Gly Thr Pro Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg 280 Asn Ala Glu Val Lys Asn Ala Met Lys Lys Leu Trp Arg Lys Lys Val 295

305 310

<210> 1977

<212> PRT

<400> 1978

<213> Mus musculus

```
<211> 318
<212> PRT
<213> Mus musculus
<400> 1977
Met Ala Ser Arg Thr Tyr Ser Met Glu Glu Val Asn Asn Val Thr Glu
                                   10
Phe Ile Phe Leu Gly Leu Ser Gln Asn Pro Glu Val Glu Lys Val Cys
           20
                                25
Phe Val Val Phe Ser Phe Phe Tyr Met Val Ile Leu Leu Gly Asn Leu
                           40
Leu Ile Met Leu Thr Val Cys Ser Gly Asn Leu Phe Lys Phe Pro Met
                       55
Tyr Phe Phe Leu Asn Phe Leu Ser Phe Val Asp Ile Cys Tyr Ser Ser
                   70
                                        75
Val Thr Ala Pro Lys Met Ile Ile Asp Leu Leu Val Lys Lys Thr
               85
                                    90
Ile Ser Tyr Val Gly Cys Met Leu Gln Leu Phe Val Val His Phe Phe
                               105
Gly Cys Thr Glu Ile Phe Ile Leu Thr Val Met Ala Tyr Asp Arg Tyr
                           120
Val Ala Ile Cys Lys Pro Leu His Tyr Met Thr Ile Met Asp Arg Glu
                       135
                                            140
Arg Cys Asn Lys Met Leu Leu Gly Thr Trp Ile Gly Gly Phe Leu His
                   150
                                       155
Ser Ile Ile Gln Val Ala Leu Val Val Gln Leu Pro Phe Cys Gly Pro
               165
                                   170
                                                       175
Asn Glu Ile Asp His Tyr Phe Cys Asp Val His Pro Val Leu Lys Leu
                               185
Ala Cys Thr Asp Thr Tyr Ile Val Gly Ile Phe Val Thr Ala Asn Ser
                            200
Gly Thr Ile Ala Leu Gly Ser Phe Val Ile Leu Leu Ile Ser Tyr Thr
                        215
                                            220
Val Ile Leu Met Ser Leu Arg Lys Gln Ser Ser Glu Gly Arg Arg Lys
                   230
                                       235
Ala Leu Ser Thr Cys Gly Ser His Ile Ala Val Val Ile Ile Phe Phe
               245
                                    250
Gly Pro Cys Thr Phe Met Tyr Met Arg Pro Asp Thr Thr Phe Ser Glu
           260
                               265
Asp Lys Met Val Ala Thr Phe Tyr Thr Ile Ile Thr Pro Met Leu Asn
                           280
                                               285
Pro Leu Ile Tyr Thr Leu Arg Asn Ala Glu Val Lys Asn Ala Met Arg
                        295
Lys Leu Trp Ala Arg Lys Phe Ser Trp Glu Thr Thr Gly Lys
                    310
<210> 1978
<211> 312
```

```
Met Gln Asn Gln Thr Ile Val Thr Glu Phe Val Leu Leu Gly Leu Ser
                                   10
Gln Asn Pro Lys Val Glu Lys Leu Leu Phe Val Ile Phe Leu Leu Leu
                               25
Tyr Leu Ala Thr Ile Gly Gly Asn Met Thr Ile Val Val Thr Ile Ala
Ser Ser Pro Val Leu Gly Ser Pro Met Tyr Phe Phe Leu Ala Phe
                        55
Leu Ser Leu Leu Asp Ala Cys Val Ser Ser Ile Val Thr Pro Lys Met
                   70
Ile Ile Asp Leu Phe Tyr Lys Arg Lys Thr Ile Ser Phe Glu Cys Cys
                                   90
               85
Met Met Gln Val Phe Ser Val His Phe Phe Ser Ala Val Glu Val Ile
                               105
           100
Ile Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro
                           120
                                               125
Leu His Tyr Ser Ser Ile Met Asn Arg Arg Leu Cys Gly Ile Leu Val
                       135
                                 . 140
Gly Ile Ala Phe Ala Gly Gly Phe Leu His Ser Ile Ile Gln Ile Ile
                   150
                                       155
Phe Thr Leu Gln Leu Pro Phe Cys Gly Pro Asn Phe Ile Asp His Phe
                                   170
               165
                                                       175
Ile Cys Asp Leu Phe Pro Leu Leu Lys Leu Ala Cys Thr Asp Thr His
           180
                               185
Ile Phe Val Ile Leu Val Phe Ala Asn Ser Gly Ser Ile Cys Ile Ile
                           200
                                               205
Ile Phe Ser Phe Leu Leu Val Ser Tyr Val Val Ile Leu Phe Ser Leu
                       215
                                           220
Arg Thr His Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Gly
                   230
                                       235
Ser His Ile Thr Val Val Leu Phe Phe Val Pro Cys Ile Leu Ile
               245
                                   250
Tyr Ala Arg Pro Thr Ser Pro Phe Ser Leu Glu Lys Asn Val Phe Ile
                               265
            260
Phe Ala Asp Val Leu Thr Pro Leu Leu Asn Pro Val Val Tyr Thr Phe
                            280
Arg Asn Lys Glu Met Lys Asn Ala Ile Arg Lys Met Trp Arg Ser Leu
                       295
Leu Val Ala Pro Asp Ile Leu Lys
                   310
```

<210> 1979 <211> 310 <212> PRT <213> Mus musculus

<400> 1979

 Met
 Gln
 Leu
 Asn
 Ile
 Asn
 Val
 Thr
 Glu
 Val
 Ile
 Leu
 Leu
 Gly
 Leu
 Thr

 Gln
 Asp
 Pro
 Ser
 Arg
 Lys
 Asn
 Ile
 Val
 Phe
 Ala
 Ile
 Phe
 Leu
 Leu
 Leu
 Phe

 Tyr
 Met
 Gly
 Thr
 Leu
 Gly
 Asn
 Leu
 Leu
 Ile
 Ile
 Val
 Thr
 Val
 Lys

 35
 40
 40
 45
 45
 Thr
 Leu
 Phe
 Leu
 Phe
 Leu
 Phe
 Thr
 Leu
 Leu
 Phe
 Leu
 Phe
 Thr
 Leu
 Leu
 Phe
 Leu
 Phe
 Thr
 Leu
 Thr
 Thr
 Ile
 Thr
 Thr</t

```
65
                   70
                                       75
Val Asp Ser Leu Gln Lys Glu Ala Ser Ile Ser Phe Thr Glu Cys Ile
               85
                                   90
Ile Gln Ile Phe Thr Phe His Phe Gly Cys Leu Glu Ile Phe Ile
                               105
Leu Ile Leu Met Ala Val Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                           120
His Tyr Met Thr Ile Met Ser Arg Arg Val Cys Gly Val Leu Val Ala
                       135
                                           140
Ile Ala Trp Met Gly Ser Cys Val His Ser Leu Val Gln Ile Phe Leu
                   150
                                       155
Ala Leu Ser Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Tyr Phe
               165
                                   170
Cys Asp Leu Gln Pro Leu Lys Leu Ala Cys Ser Asp Thr Tyr Leu
                               185
                                                  190
           180
Ile Asn Leu Leu Val Ser Asn Ser Gly Ala Ile Cys Thr Val Ser
                           200
                                               205
Phe Leu Val Leu Met Phe Ser Tyr Val Ile Ile Leu His Ser Leu Arg
                       215
Asn His Ser Ala Glu Gly Arg Arg Lys Ala Leu Ser Thr Cys Ile Ser
                   230
                                        235
His Ile Ile Val Val Ile Leu Phe Phe Gly Pro Cys Ile Phe Ile Tyr
               245
                                   250
Thr Arg Pro Ala Thr Thr Phe Pro Met Asp Lys Met Ile Ser Ile Phe
                               265
Tyr Ser Ile Gly Thr Pro Leu Leu Asn Pro Leu Ile Tyr Thr Leu Arg
                           280
Asn Ala Glu Val Lys Asn Ala Met Lys Lys Leu Trp Arg Lys Lys Ile
                       295
Val Ser Asp Asp Lys Lys
```

<210> 1980 ...

<211> 308

<212> PRT

<213> Mus musculus

<400> 1980

Met Ala Trp Ser Asn His Ser Val Ile Thr Glu Phe Val Leu Thr Gly 10 Leu Ser Asp Asp Pro Leu Ile Pro Ala Leu Leu Phe Ala Leu Phe Leu 25 Gly Ile Tyr Val Leu Thr Met Thr Gly Asn Leu Thr Met Leu Leu Val 4.0 Ile Thr Ala Asp Ser His Leu His Thr Pro Met Tyr Phe Phe Leu Ser 5.5 Asn Leu Ser Phe Val Asp Leu Cys Phe Ser Ser Val Thr Val Pro Lys 70 75 Leu Leu Lys Asp Leu Leu Ser Ala Lys Lys Thr Ile Ser Ile Glu Gly 90 Cys Leu Ala Gln Val Phe Phe Val Phe Phe Ser Ser Gly Thr Glu Ala 105 Cys Leu Leu Ser Val Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys His 120 125 Pro Leu Leu Tyr Gly Gln Val Met Arg Asn Glu Leu Cys Val Arg Leu 135

```
Val Val Ile Ser Trp Gly Val Ala Ser Leu Asn Ala Thr Ile Ile Val
                    150
                                        155
Leu Leu Ala Val Asn Leu Asp Phe Cys Gly Ala Gln Thr Ile His His
               165
                                    170
Tyr Thr Cys Glu Leu Pro Ala Leu Phe Pro Leu Ser Cys Ser Asp Ile
                                185
            180
Ser Ile Thr Val Val Val Leu Leu Cys Ser Ser Leu Leu His Gly Leu
                            200
Gly Thr Phe Ile Pro Ile Phe Phe Ser Tyr Ala Arg Ile Val Ser Ala
                        215
                                            220
Ile Leu Ser Ile Ser Ser Thr Thr Gly Arg Ser Lys Ala Phe Ser Thr
                    230
                                        235
Cys Ser Ser His Leu Ala Ala Val Thr Leu Phe Phe Gly Ser Gly Phe
                                    250
Leu Cys Tyr Leu Met Pro Pro Ser Gly Ser Ser Leu Asp Leu Leu Leu
           260
                                265
Ser Leu Gln Tyr Ser Ala Val Thr Pro Met Leu Asn Pro Leu Ile Tyr
                            280
Ser Leu Lys Asn Gln Glu Val Lys Ala Ala Val Gln Arg Thr Leu Arg
    290
                        295
                                            300
Lys Tyr Leu Leu
305
```

<211> 306

<212> PRT

<213> Mus musculus

<400> 1981

Met Val Asn Gln Ser Ser Pro Val Val Phe Phe Met Leu Gly Phe Ser 10 Glu His Pro Gln Leu Glu Lys Val Leu Phe Val Val Leu Cys Ser 20 25 Tyr Leu Leu Thr Leu Leu Gly Asn Thr Leu Ile Leu Leu Ser Thr Leu Asp Pro Arg Leu His Ser Pro Met Tyr Phe Phe Leu Ser Asn Leu 55 Ser Phe Leu Asp Leu Cys Phe Thr Thr Thr Cys Val Pro Gln Met Leu 70 75 Phe Asn Leu Trp Gly Pro Ala Lys Thr Ile Ser Phe Leu Gly Cys Phe 85 90 Val Gln Leu Phe Ile Phe Met Ser Leu Gly Thr Thr Glu Cys Ile Leu 100 105 110 Leu Thr Val Met Ala Phe Asp Arg Tyr Val Ala Val Cys Gln Pro Leu 120 125 His Tyr Ala Thr Lys Ile Asn Pro His Leu Cys Arg Gln Leu Ala Gly 135 140 Ile Ala Trp Ala Ile Gly Leu Val Gln Ser Ile Val Gln Thr Pro Pro 150 155 Thr Leu Lys Leu Pro Phe Cys Ser Tyr Arg Gln Ile Asp Asn Phe Leu 165 170 Cys Glu Val Pro Ser Leu Ile Gln Leu Ser Cys Gly Asp Thr Thr Tyr 185 Asn Glu Ile Gln Met Ala Val Ala Ser Ile Phe Ile Val Val Pro 200 205 Leu Ser Leu Ile Leu Val Ser Tyr Gly Ala Ile Ala Arg Ala Val Leu

```
210
                       215
                                            220
Lys Ile Ser Ser Ala Lys Gly Arg Arg Lys Ala Phe Gly Thr Cys Ser
       230
                                       235
Ser His Leu Ile Val Val Thr Leu Phe Tyr Ser Ser Val Ile Ala Val
               245
                                   250
Tyr Leu Gln Pro Lys Asn Pro Tyr Ala Arg Glu Arg Gly Lys Phe Phe
Gly Leu Phe Tyr Ala Val Gly Thr Pro Thr Leu Asn Pro Leu Val Tyr
                           280
Thr Leu Arg Asn Lys Gly Gly Lys Lys Ser Ile Leu Glu Ala Ala Lys
Glu Arg
305
<210> 1982
<211> 314
<212> PRT
<213> Mus musculus
<400> 1982
Met Gly Gln Arg Ser Asn Val Thr Glu Phe Ile Leu Leu Gly Leu Thr
                                   10
Gln Asp His Val Gly Gln Arg Ala Leu Phe Val Met Phe Leu Leu Ile
                               25
Tyr Ile Val Thr Ile Val Gly Asn Leu Leu Ile Val Gly Thr Val Ile
                           40
Ala Ser Pro Ser Leu Gly Thr Pro Met Tyr Phe Phe Leu Ala Tyr Leu
                       55
Ser Leu Leu Asp Ala Val Tyr Ser Thr Ala Ile Ser Pro Lys Leu Met
                   70
                                       75
Val Asp Leu Leu Cys Asp Arg Lys Thr Ile Ser Phe Ser Ala Cys Met
               85
Thr Gln Leu Phe Leu Glu His Leu Leu Gly Gly Ala Glu Val Phe Leu
           100
                               105
Leu Met Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu
                           120
                                               125
His Tyr Leu Ile Ile Met Asn Arg Arg Val Cys Phe Leu Leu Val
                       135
                                           140
Val Ser Trp Ala Gly Gly Leu Ala His Ser Val Ala Gln Leu Leu Phe
                   150
                                       155
Val Tyr Asn Leu Pro Phe Cys Gly Pro Asn Val Ile Asp His Phe Ile
               165
                                   170
Cys Asp Met Tyr Pro Leu Leu Gly Leu Ala Cys Thr Asp Thr His Ile
           180
                               185
Ile Gly Leu Thr Val Val Ala Asn Gly Gly Ala Ile Cys Met Leu Val
                           200
Phe Ile Ile Leu Ile Ile Ser Tyr Gly Ile Ile Leu Arg Ser Leu Lys
                       215
Thr His Ser Gln Glu Gly Arg Gln Lys Ala Leu Ser Thr Cys Ser Ser
                   230
                                        235
His Ile Met Val Val Leu Phe Phe Val Pro Cys Ile Phe Met Tyr
               245
                                   250
Val Arg Pro Val His Asn Phe Pro Ile Asp Lys Ser Ile Thr Val Phe
                               265
Tyr Thr Ile Val Thr Pro Ile Leu Asn Pro Leu Ile Tyr Ala Leu Arg
       275
                           280
```

Asn Ser Glu Met Lys Arg Ser Met Glu Asn Leu Leu Tyr Lys Val Phe 295 Pro Arg Asp Lys Ile Thr Met Ser Phe His 310 <210> 1983 <211> 313 <212> PRT <213> Mus musculus <400> 1983 Met Glu Leu His Ser Pro Pro Ser Asn Val Thr Glu Phe Val Leu Leu 10 Gly Leu Thr Gln Asn Pro Arg Leu Gln Lys Ile Leu Phe Ile Val Phe 20 25 Leu Phe Val Phe Leu Phe Thr Val Leu Ala Asn Leu Leu Ile Val Leu 40 Thr Ile Ser Phe Ser Pro Thr Leu Ser Ala Pro Met Tyr Phe Phe Leu 55 Thr Tyr Leu Ser Phe Ile Asp Ala Phe Tyr Thr Ser Val Thr Thr Pro

Lys Met Ile Ile Asp Leu Leu Tyr Gln Arg Arg Thr Ile Ser Leu Ala 8.5 90 Gly Cys Leu Thr Gln Leu Phe Val Glu His Phe Leu Gly Gly Ser Glu 105 110 Ile Ile Leu Leu Ile Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys 120 125 Lys Pro Leu His Tyr Met Thr Ile Met Arg Gln Gly Leu Cys Arg Leu 135 140 Leu Val Val Ala Trp Ile Gly Gly Ile Leu His Ala Thr Met Gln 150 155 Ile Phe Phe Met Ile Asn Leu Pro Phe Cys Gly Pro Asn Val Ile Asp 170 165 His Phe Met Cys Asp Leu Phe Pro Leu Lys Leu Ala Cys Arg Asp 185 Thr His Lys Leu Gly Ile Ile Val Ala Ala Asn Ser Gly Ala Met Cys 200 195 205 Phe Leu Ile Phe Thr Met Leu Leu Ile Ser Tyr Ile Val Ile Leu Arg 215 Ser Leu Lys Ser His Ser Ser Glu Gly Arg Arg Lys Ala Leu Ser Thr 230 235 Cys Gly Ser His Phe Thr Val Val Val Leu Phe Phe Val Pro Cys Ile 245 250 Phe Thr Tyr Met Arg Pro Val Thr Tyr Pro Val Asp Lys Leu Val 260 265 Thr Val Phe Phe Ala Ile Leu Thr Pro Met Leu Asn Pro Ile Ile Tyr 280 285 Thr Ala Arg Asn Thr Glu Val Lys Asn Ala Met Arg Asn Leu Leu Lys 295 300 Arg Gln Val Thr Tyr Pro Val Leu Lys

Arg Gin Val Thr Tyr Pro Val Leu Lys 305 310

<210> 1984 <211> 316

<212> PRT

<400> 1984

```
Ile Leu Asp Gly Ser Gly Ser Pro Glu Leu Leu Cys Ala Thr Ile Ala
Ala Leu Tyr Met Leu Ala Leu Ile Ser Asn Gly Met Leu Ile Leu Val
                           40
Ile Thr Met Asp Ile Tyr Leu His Val Pro Met Tyr Leu Leu Glu
                       55
Gln Leu Ser Leu Met Asp Leu Leu Leu Ala Ser Val Ile Ser Pro Lys
                   70
                                       75
Ala Val Met Asp Phe Leu Leu Lys Asp Asn Thr Ile Thr Phe Gly Gly
                                   90
               85
Cys Ala Leu Gln Met Phe Leu Glu Leu Ala Leu Gly Ser Ala Glu Asp
                               105
Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                           120
Pro Leu Asn Tyr Met Ile Phe Met Arg Pro Ser Ile Cys Trp Leu Met
                       135
Val Ala Ile Ser Trp Ile Pro Ala Ser Leu Ser Ala Leu Gly Tyr Thr
                  150
                                       155
Ile Tyr Thr Met Gln Tyr Pro Phe Cys Lys Ser Arg Glu Ile Arg His
                                  170
               165
Leu Phe Cys Glu Ile Pro Pro Leu Leu Lys Leu Ala Cys Ala Asp Thr
           180
                               185
Ser Arg Tyr Gln Leu Met Val Tyr Leu Met Gly Val Thr Leu Leu Ile
                                               205
       195
                           200
Pro Pro Leu Ala Ala Ile Leu Ala Ser Tyr Ser Leu Ile Leu Phe Thr
                       215
                                           220
Val Leu Lys Met Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Thr
                   230
                                       235
Cys Ser Ser His Leu Thr Val Val Gly Met Tyr Tyr Gly Pro Leu Thr
               245
                                   250
Val Met Tyr Ile Leu Pro Ser Ser Tyr His Ser Ser Lys Gln Glu Asn
                               265
Ile Leu Ser Phe Leu Tyr Thr Ile Val Thr Pro Ala Leu Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Glu Val Ser Gly Ala Leu Lys Arg Val
                       295
Leu Gly Lys Arg Leu Leu Ser Thr His Pro Asn Phe
                   310
<210> 1985
<211> 315
<212> PRT
<213> Mus musculus
<400> 1985
Met Glu Val Cys Asn Ser Thr Leu Gly Ser Gly Phe Ile Leu Val Gly
                                   10
Ile Leu Asp Asp Ser Gly Phe Pro Glu Leu Leu Cys Ala Thr Ile Thr
                               25
Ala Leu Tyr Phe Leu Ala Ile Thr Ser Asn Gly Leu Leu Leu Val
                           40
```

Met Glu Pro Trp Asn Ser Thr Leu Gly Ser Gly Phe Ile Leu Val Gly

```
Ile Thr Met Asp Ala Arg Leu His Val Pro Met Tyr Leu Leu Trp
                       55
Gln Leu Ser Leu Met Asp Leu Leu Thr Ser Val Ile Thr Pro Lys
                                       75
Ala Ile Leu Asp Tyr Leu Leu Lys Asp Asn Thr Ile Ser Phe Gly Gly
                                   90
Cys Ala Leu Gln Met Phe Leu Glu Leu Thr Leu Gly Ser Ala Glu Asp
                               105
Leu Leu Ala Phe Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
                          120
Pro Leu Asn Tyr Thr Ile Leu Met Ser Gln Lys Val Cys Cys Leu Met
                       135
Ile Ala Thr Ser Trp Ile Leu Ala Ser Leu Ser Ala Leu Gly Tyr Ser
                   150
                                       155
Ile Tyr Thr Met Gln Tyr Pro Phe Cys Lys Ser Arg Gln Ile Arg His
               165
                                   170
Leu Phe Cys Glu Ile Pro Pro Leu Leu Lys Leu Ala Cys Ala Asp Thr
                               185
Ser Thr Tyr Glu Leu Met Val Tyr Val Met Gly Val Thr Leu Leu Ile
        195
                           200
Pro Pro Leu Ala Ala Ile Leu Ala Ser Tyr Ser Leu Ile Leu Phe Thr
                       215
                                           220
Val Leu His Met Pro Ser Asn Glu Gly Arg Lys Lys Ala Leu Val Thr
                   230
                                       235
Cys Ser Ser His Leu Thr Val Val Gly Met Trp Tyr Gly Gly Ala Ile
                                   250
               245
Val Met Tyr Val Leu Pro Ser Ser Phe His Ser Pro Lys Gln Asp Asn
                               265
Ile Ser Ser Val Phe Tyr Thr Ile Phe Thr Pro Ala Leu Asn Pro Leu
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Glu Val Thr Gly Ala Leu Arg Arg Val
                       295
Leu Gly Lys Arg Phe Ser Val Gln Ser Thr Phe
                    310
```

<211> 315

<212> PRT

<213> Mus musculus

<400> 1986

Met Leu Met Ile Gln Trp Asn Asn Trp Thr Arg Asn Ser Asp Phe Ile 10 Leu Leu Gly Leu Phe Asp His Ser Pro Leu His Thr Phe Phe Ser 25 Leu Ile Leu Gly Ile Phe Phe Met Ala Phe Ile Gly Asn Ser Ile Met 40 Val Ile Leu Ile Tyr Leu Asp Ala His Leu His Thr Pro Met Tyr Ile Leu Leu Ser Gln Leu Ser Leu Met Asp Leu Met Leu Ile Cys Thr Thr 70 75 Val Pro Gln Met Ala Phe Asn Phe Leu Ser Gly Asn Lys Ser Ile Ser 90 Met Val Gly Cys Gly Ile Gln Ile Phe Phe Tyr Val Ser Leu Leu Gly 100 105 Ala Glu Cys Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala

```
115
                          120
                                               125
Ile Cys Tyr Pro Leu Arg Tyr Pro Ile Leu Met Ser Asp Lys Ile Cys
                      135
                                           140
Gly Leu Met Ala Ala Ser Ser Trp Val Leu Gly Ser Leu Asp Gly Ile
                   150
                                       155
Ile Glu Val Ala Ala Ala Leu Ser Phe Ser Tyr Cys Gly Ala Arg Glu
                                   170
Ile Pro His Phe Phe Cys Asp Val Pro Ala Leu Leu Thr Leu Ser Cys
           180
                               185
Ser Asn Thr Leu Ile Phe Glu Arg Ile Ile Phe Phe Cys Cys Val Ile
                           200
Met Leu Thr Leu Pro Val Ala Ile Ile Ile Ala Ser Tyr Thr Arg Val
                       215
                                           220
Ile Leu Thr Val Leu His Met Ser Ser Ala Glu Ser Arg His Lys Ala
                   230
                                       235
Phe Ala Thr Cys Ser Ser His Leu Met Val Val Gly Met Tyr Tyr Gly
              245
                                  250
Ala Ala Met Phe Ile Tyr Met Arg Pro Ser Ser Gly Arg Ser Pro Thr
                               265
Gln Asp Lys Ile Val Ser Ala Phe Tyr Thr Ile Leu Thr Pro Met Leu
       275
                           280
Asn Pro Leu Ile Tyr Ser Leu Arg Asn Lys Glu Val Ala Arg Ala Phe
                       295
Met Lys Val Leu Gly Ile Asp Lys Ala Ala Ala
                   310
```

<210> 1987 <211> 312

<212> PRT

<213> Mus musculus

<400> 1987

Met Glu Gly Thr Asn Arg Ser Val Val Ser Glu Phe Met Phe Val Gly 1.0 Leu Thr Asn Ser Trp Lys Met Gln Val Leu Leu Phe Val Phe Ala Ser Val Phe Tyr Met Ala Ser Met Met Gly Asn Ser Leu Ile Ile Phe Thr 40 Val Ala Ser Asp Pro His Leu His Ser Pro Met Tyr Phe Leu Leu Ala 55 Asn Leu Ser Phe Ile Asp Leu Gly Val Ser Cys Val Thr Cys Pro Lys 70 75 Met Ile Tyr Asp Leu Phe Arg Lys His Lys Val Ile Ser Phe Arg Gly 85 90 Cys Ile Thr Gln Ile Phe Phe Ile His Val Ile Gly Gly Val Glu Val 1.00 105 Val Leu Leu Ile Gly Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Lys 120 Pro Leu His Tyr Leu Thr Ile Met Asn Ala Lys Met Cys Ile Phe Ile 135 Leu Val Ser Ala Trp Val Val Gly Leu Met His Ser Leu Val Gln Phe 150 155 Val Tyr Ile Val Asn Leu Pro Phe Cys Gly Pro Asn Ile Leu Asp Ser 170 Phe Tyr Cys Asp Leu Pro Arg Phe Ile Arg Leu Ala Cys Val Asp Thr 180 185

```
Asn Gln Leu Glu Leu Met Val Ser Ala Asn Ser Gly Phe Ile Ser Val
      195
                       200
                                        205
Gly Ser Phe Phe Ile Leu Val Ile Ser Tyr Ile Val Ile Ile Val Thr
                   215
                                    220
Val Gln Lys His Ser Ser Ser Gly Ser Ser Lys Ala Leu Ser Thr Leu
                 230
                                  235
Ser Ala His Ile Ser Val Val Val Leu Phe Phe Gly Pro Leu Ile Phe
             245
                              250
Val Tyr Thr Trp Pro Ser Pro Ser Thr His Leu Asp Lys Tyr Leu Ala
       260 265 270
Ile Phe Asp Ala Val Gly Thr Pro Phe Leu Asn Pro Val Ile Tyr Thr
             280
Leu Arg Asn Gln Asp Met Lys Thr Ala Met Lys Arg Val Cys Arg Gln
                            300
290 295
Leu Leu Lys Tyr Gly Lys Ile Ser
305
                310
```

<211> 312

<212> PRT

<213> Mus musculus

<400> 1988

Met Gly Glu Ala Asn Cys Ser Val Val Ser Glu Phe Val Phe Leu Gly															
Met 1	Gly	Glu	Ala	Asn 5	Cys	Ser	Val	Val	Ser 10	Glu	Phe	Val	Phe	Leu 15	Gly
Leu	Ser	Asn	Ser 20	Trp	Ala	Ile	Gln	Leu 25	Phe	Leu	Phe	Phe	Phe 30	Ser	Суѕ
Ile	Phe	Tyr 35	Val	Ala	Ser	Leu	Leu 40	Gly	Asn	Phe	Leu	Ile 45	Val	Leu	Thr
Val	Thr 50	Ser	Asp	Pro	Gln	Leu 55	Gln	Ser	Pro	Met	Tyr 60	Phe	Leu	Leu	Gly
Asn 65	Leu	Ser	Ile	Ile	Asp 70	Leu	Ile	Phe	Cys	Ser 75	Ser	Thr	Thr	Pro	Lys 80
Met	Ile	Tyr	Asp	Leu 85	Phe	Arg	Arg	His	Lys 90	Thr	Ile	Ser	Phe	Gly 95	Gly
Cys	Ile	Thr	Gln 100	Ile	Phe	Phe	Ile	His 105	Ala	Val	Gly	Gly	Thr 110	Glu	Met
Val	Leu	Leu 115	Ile	Ala	Met	Ala	Phe 120	Asp	Arg	Tyr	Val	Ala 125	Ile	Cys	Lys
Pro	Leu 130	His	Tyr	Leu	Thr	Ile 135	Met	Ser	Pro	Gln	Lys 140	Cys	Ile	Leu	Ile
Leu 145	Val	Ala	Ser	Trp	Ile 150	Ile	Gly	Phe	Ile	His 155	Ser	Val	Thr	Gln	Leu 160
Ser	Phe	Val	Val	Asp 165	Leu	Pro	Phe	Cys	Gly 170	Pro	Asn	Glu	Leu	Asp 175	Ser
Phe	Phe	Cys	Asp 180	Leu	Pro	Arg	Phe	Ile 185	Lys	Leu	Ala	Cys	Val 190	Asp	Thr
Tyr	Thr	Leu 195	Gly	Phe	Met	Val	Thr 200	Ala	Asn	Ser	Gly	Phe 205	Ile	Ser	Val
Ala	Ser 210	Phe	Leu	Ile	Leu	Ile 215	Ile	Ser	Tyr	Ile	Phe 220	Ile	Leu	Val	Thr
Val 225	Gln	Lys	Lys	Ser	Leu 230	Gly	Ser	Leu	Gly	Lys 235	Ala	Leu	Ser	Thr	Leu 240
Ser	Ala	His	Val	Ile 245	Val	Val	Val	Leu	Phe 250	Phe	Gly	Pro	Leu	Ile 255	Phe
Phe	Tyr	Thr	Trp	Pro	Phe	Pro	Thr	Ser	His	Leu	Asp	Lys	Phe	Leu	Ala

260 265 Ile Phe Asp Ala Val Ile Thr Pro Phe Leu Asn Pro Val Ile Tyr Thr 280 Leu Arg Asn Lys Glu Met Lys Val Ala Met Arg Arg Leu Cys Ser Gln 295 300 Phe Val Asn Tyr Asn Lys Ile Ser 310 <210> 1989 <211> 316 <212> PRT <213> Mus musculus <400> 1989 Met Asp Gly Gly Asn His Ser Val Val Ser Glu Phe Leu Leu Gly Leu Thr Asn Ser Trp Arg Ile Gln Ile Leu Leu Phe Leu Phe Phe Thr 25 Val Phe Tyr Val Ala Ser Met Leu Gly Asn Leu Leu Ile Val Leu Thr 4.0 Ile Ile Ser Asp His His Leu His Ser Pro Met Tyr Phe Leu Leu Ala 55 Asn Leu Ser Phe Ile Asp Thr Gly Val Ser Ser Ile Ala Thr Pro Lys 75 Met Ile Tyr Asp Leu Phe Arg Lys His Lys Val Ile Ser Leu Asn Gly 85 90 Cys Ile Thr Gln Met Phe Phe Ile His Thr Val Gly Gly Thr Glu Met 105 100 110 Val Leu Leu Ile Val Met Ala Tyr Asp Arg Tyr Ile Ala Ile Cys Lys 120 125 Pro Leu His Tyr Leu Thr Ile Met Ser Leu Arg Met Cys Ile Val Leu 135 140 Leu Ala Leu Ala Trp Ile Ile Gly Leu Ile His Ser Val Ala Gln Leu 150 155 Ala Phe Val Val Asn Leu Pro Phe Cys Gly Ala Asn Lys Met Asp Ser 165 170 Phe Tyr Cys Asp Phe Pro Arg Phe Ile Lys Leu Ala Cys Thr Asp Thr 185 Tyr Arg Leu Glu Phe Leu Val Thr Ala Asn Ser Gly Phe Ile Ser Met 200 205 Ala Thr Phe Phe Ile Leu Ile Val Ser Tyr Ile Phe Ile Leu Val Thr 215 220 Val Arg Lys His Ser Ser Gly Ala Ser Ser Lys Ala Leu Ser Thr Leu 230 235 Ser Ala His Ile Thr Val Val Val Phe Phe Gly Pro Cys Ile Ile 245 250 Val Tyr Val Trp Pro Phe Pro Thr Leu Pro Ile Asp Lys Phe Leu Ala 260 265 Ile Phe Asp Ala Ile Ile Thr Pro Ser Met Asn Pro Val Ile Tyr Thr 275 280 Leu Arg Asn Lys Glu Met Lys Val Ala Met Arg Arg Leu Phe Ala Arg

290 295 300 Ala Leu Ser Phe Ile Asp Ser Leu Arg Asp Ser Asn 305 310 315

```
<211> 320
<212> PRT
<213> Mus musculus
<400> 1990
Met Met Ile Leu Met Ser Glu Ala Met Tyr Gly Met Asn Cys Ser Val
      5
                                   1.0
Val Ser Glu Phe Val Phe Leu Gly Ile Thr Asn Ile Trp Glu Val Gln
                               25
Phe Leu Leu Phe Phe Phe Thr Leu Leu Phe Tyr Phe Ala Ser Met Ile
                           40
Gly Asn Leu Val Ile Val Leu Thr Val Thr Leu Asp Pro His Leu Asn
                       55
Ser Pro Leu Tyr Phe Leu Leu Ala Asn Leu Ser Val Ile Asp Met Ile
                   70
                                       75
Phe Cys Ser Ile Thr Ala Pro Lys Met Ile Cys Asp Ile Phe Lys Lys
               85
                                   90
His Lys Thr Ile Ser Phe Trp Gly Cys Ile Thr Gln Ile Phe Phe Ser
                               105
His Ala Val Gly Gly Thr Glu Met Val Leu Leu Ile Ala Met Ala Phe
                           120
Asp Arg Tyr Val Ala Ile Cys Lys Pro Leu His Tyr Leu Ile Ile Met
                       135
                                           140
Ser Pro Arg Val Cys Leu Phe Phe Leu Ile Thr Ser Trp Val Ile Gly
                                       155
                   150
Leu Ile His Ser Val Val Gln Leu Val Phe Val Val Asp Leu Pro Phe
               165
                                   170
Cys Gly Pro Asn Thr Leu Asp Ser Phe Tyr Cys Asp Leu Pro Arg Leu
                              185
          180
Leu Arg Leu Ala Cys Thr Asn Thr Gln Glu Leu Glu Leu Met Val Thr
                           200
Val Asn Ser Gly Leu Ile Ser Val Gly Ser Phe Leu Leu Val Ile
                       215
Ser Tyr Ile Phe Ile Leu Phe Thr Val Trp Lys His Ser Ser Cys Gly
                   230
                                       235
Leu Ser Lys Ala Leu Ser Thr Leu Ser Ala His Ile Thr Val Val Ile
               245
                                   250
Leu Phe Phe Gly Pro Leu Met Phe Phe Tyr Thr Trp Pro Ser Pro Thr
                               265
           260
Ser His Leu Asp Lys Tyr Leu Ala Ile Phe Asp Ala Phe Ile Thr Pro
                           280
Phe Leu Asn Pro Val Ile Tyr Thr Phe Arg Asn Lys Asp Met Lys Val
                       295
                                           300
Ala Met Gly Arg Leu Trp Gly Tyr Leu Arg His Tyr Arg Lys Met Ser
<210> 1991
<211> 310
<212> PRT
<213> Mus musculus
<400> 1991
Met Gly Asn Gly Thr Thr Val Gln Glu Phe Thr Leu Glu Gly Phe Pro
```

10

Ala Val Gln His Leu Gly Arg Leu Leu Phe Ser Leu Asn Leu Leu Ala

<210> 1990

```
40
Thr Ser Thr Arg Leu Lys Ser Pro Met Tyr Phe Phe Leu Gly Val Phe
                        55
Ser Phe Gly Glu Ser Cys Phe Thr Ser Ala Val Ile Pro Lys Leu Leu
Ala Ile Phe Leu Leu Gly Lys Gln Thr Ile Ser Phe Val Ala Cys Phe
               8.5
                                    90
Ile Gln Thr Phe Val Thr Leu Phe Ile Gly Ala Phe Gly Phe Phe Leu
                               105
Ile Ala Val Met Ser Val Asp Arg Cys Val Ala Ile Cys Lys Pro Leu
       115
                           120
His Tyr Pro Thr Ile Met Asp Leu Arg Thr Cys Ile Leu Leu Ile Met
   130
                       135
                                           140
Ala Cys Leu Ala Leu Thr Phe Thr Leu Ile Thr Trp Leu Val Val Thr
                   150
                                       155
Val Ser Arg Leu Ser Phe Cys Gly Pro His Val Ile Pro His Phe Phe
                                    170
                165
Cys Asp Ile Ser Pro Leu Ile His Leu Ser Cys Ser Asp Thr Ser Ser
Ala Glu Ala Leu Thr Phe Ala Leu Ala Leu Ile Ile Leu Phe Ser Ser
                            200
                                                205
Leu Ile Ile Thr Thr Ile Ala Tyr Ser Asn Ile Val Ile Thr Ile Val
                       215
Arg Leu Pro Ser Ala Lys Glu Arg Gln Arg Ala Phe Ser Thr Cys Ser
                    230
                                        235
Ser His Leu Ile Val Leu Ser Leu Met Tyr Gly Ser Cys Val Phe Ile
                245
                                    250
Tyr Val Lys Pro Lys Gln Met Ser Arg Leu Glu Ser Asn Arg Glu Ala
           260
                                265
Ala Leu Val Asn Thr Val Val Thr Pro Leu Leu Asn Pro Val Ile Tyr
                            280
Thr Leu Arg Asn Lys Gln Val His Gln Ala Leu Arg Glu Thr Leu Ser
                        295
Arg Ile Lys Ile Ser Gly
<210> 1992
<211> 310
<212> PRT
<213> Mus musculus
<400> 1992
Met Gly Gln Glu Phe Ile Asn Gln Thr Trp Val Asn Glu Phe Ile Leu
Leu Gly Leu Ser Ser Asp Arg Asn Thr Gln Val Phe Leu Phe Val Leu
Val Leu Ala Met Tyr Val Val Thr Val Val Gly Asn Thr Leu Ile Leu
Phe Leu Ile Arg Leu Asp Ile Arg Leu His Thr Pro Met Tyr Phe Phe
                        55
Leu Ser Val Leu Ser Ile Val Asp Leu Cys Tyr Gly Asn Ser Ile Ala
                   70
                                        75
Pro Gln Met Leu Ala His Leu Val Ser Ala Gln Lys Leu Ile Pro Phe
```

20 25 30

Tyr Leu Ala Ser Ile Thr Gly Asn Val Val Ile Val Ser Ile Ile Cys

```
His Ser Cys Val Phe Gln Leu Tyr Ile Ser Leu Ala Leu Gly Gly Ser
           100
                              105
Glu Phe Phe Leu Leu Gly Ala Met Ser Tyr Asp Arg Tyr Val Ala Val
                           120
                                              125
Cys His Pro Leu His Tyr Thr Val Ile Met Asp Gly Gly Val Cys Leu
                       135
Gly Leu Ala Ala Ser Cys Leu Met Ala Gly Phe Phe Asn Ser Leu Met
                                      155
                   150
Glu Thr Val Ile Thr Phe Arg Leu Pro Leu Cys His Asn Val Ile Asn
                                   170
               165
His Phe Ala Cys Glu Thr Leu Ala Val Leu Arg Leu Ala Cys Val Asp
        180
                               185
Ile Ser Phe Asn Lys Val Met Val Ala Ile Ser Gly Phe Leu Val Ile
       195
                          200
                                              205
Met Leu Pro Cys Cys Leu Val Leu Phe Ser Tyr Thr Arg Ile Val Ile
                       215
                                          220
Ala Ile Leu Arg Ile Arg Ser Thr Gln Gly Arg His Lys Ala Phe Gly
                   230
                                       235
Thr Cys Ala Ser His Leu Thr Val Val Cys Met Cys Phe Gly Ala Thr
               245
                                   250
Ile Phe Thr Tyr Leu Gly Pro Arg Ser Ala Ser Ser Glu Asp Lys Glu
                               265
           260
Lys Met Val Ala Leu Phe Tyr Ala Val Val Ala Pro Thr Leu Asn Pro
                           280
                                         . 285
Val Ile Tyr Ser Leu Arg Asn Lys Glu Val Met Ala Ala Leu Thr Lys
                       295
                                           300
Leu Val Glu Lys Leu Arg
```

<211> 313

<212> PRT

<213> Mus musculus

<400> 1993

Met Lys Arg Asp Asn Ala Thr Trp Val Ser Glu Phe Ile Leu Met Gly Leu Ser Ser Asp Lys His Ile Gln Ala Gly Leu Phe Val Leu Phe Gly 25 Val Thr Tyr Leu Leu Thr Leu Leu Gly Asn Gly Leu Ile Val Leu Leu 40 Ile Ala Leu Asp Pro Arg Leu His Leu Pro Met Tyr Phe Phe Leu Cys 55 60 His Leu Ser Val Val Asp Ile Cys Tyr Thr Ser Ser Gly Val Pro Gln Met Leu Ala His Phe Leu Met Glu Lys Lys Thr Ile Ser Phe Ala Leu 90 Cys Gly Thr Gln His Phe Phe Ala Leu Ala Leu Gly Gly Thr Glu Phe 100 105 110 Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asn 120 Pro Leu Arg Tyr Thr Val Val Met Asn Pro Arg Leu Cys Met Gly Leu 135 140 Ala Gly Val Ser Trp Phe Val Gly Val Val Asn Ser Ala Val Glu Thr 150 155 Ala Val Thr Met Arg Leu Pro Thr Cys Gly His Asn Val Leu Asn His

170 165 Val Ala Cys Glu Thr Leu Ala Leu Val Arg Leu Ala Cys Val Asp Ile 185 Thr Leu Asn Gln Val Val Ile Leu Ala Ser Ser Val Val Val Leu Leu 200 205 Val Pro Cys Cys Leu Val Ser Leu Ser Tyr Ala Tyr Ile Val Thr Ala 215 220 Ile Leu Lys Ile Arg Ser Thr Gln Gly Arg Arg Lys Ala Phe Gly Thr 230 235 Cys Ala Ser His Leu Thr Val Val Ser Met Ser Tyr Gly Met Ala Leu 250 245 Phe Thr His Met Glu Pro Thr Ser Thr Ala Ser Ala Glu Gln Asp Lys 265 Val Val Val Phe Tyr Ala Val Val Thr Pro Met Leu Asn Pro Leu 280 285 Val Tyr Ser Leu Arg Asn Lys Asp Val Lys Ala Ala Phe Ser Arg Val 295 Leu Met Lys Ile Phe Glu Ser Lys Asn 310

<210> 1994

<211> 312

<212> PRT

<213> Mus musculus

<400> 1994

Met Ile Met Asn Asn Lys Thr Val Ile Ser Gln Phe Ile Leu Leu Gly 10 Leu Pro Ile Pro Gln Glu Tyr Gln His Leu Tyr Tyr Ala Leu Phe Leu 25 Ala Met Tyr Leu Thr Thr Val Leu Gly Asn Leu Ile Ile Ile Leu 40 Ile Ile Leu Asp Ser His Leu His Thr Pro Met Tyr Leu Phe Leu Ser Asn Leu Ser Phe Ser Asp Leu Cys Phe Ser Ser Val Thr Met Pro Lys 75 70 Leu Leu Gln Asn Met Gln Ser Gln Asp Thr Ser Ile Ser Tyr Ala Gly Cys Leu Thr Gln Met Tyr Phe Leu Leu Val Phe Gly Asp Leu Glu Ser 105 Ile Leu Leu Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Phe 120 115 125 Pro Leu His Tyr Met Ser Ile Met Ser Pro Thr Leu Cys Val Cys Leu 135 Leu Val Leu Ser Trp Val Phe Thr Val Leu Tyr Ser Met Leu His Thr 150 155 Leu Leu Leu Ser Arg Leu Ser Phe Cys Glu Asp Asn Leu Ile His His 170 Phe Phe Cys Asp Ile Ser Ala Leu Leu Lys Leu Ala Cys Ser Asp Ile 185 His Ile Asn Glu Leu Met Ile Phe Ile Met Gly Gly Leu Val Ser Ile 200 Ile Pro Phe Leu Leu Ile Val Val Ser Tyr Ile Gln Ile Val Tyr Ser 215 220 Ile Leu Lys Ile Ser Ser Ala His Val Leu His Lys Ile Phe Ser Thr 230 235

```
Cys Gly Ser His Leu Ser Val Val Ser Leu Phe Tyr Gly Thr Ile Phe 245

Ala Leu Tyr Leu Cys Pro Ser Ala Asn Asn Ser Thr Val Lys Glu Ile 260

Ser Met Ala Met Met Cys Thr Val Val Thr Pro Met Leu Asn Pro Phe 275

Ile Tyr Ser Leu Arg Asn Asp Asp Met Arg Asp Ala Leu Phe Gly Val 290

Leu Gly Lys Lys Lys Ile Ser Leu 310

<210> 1995
<211> 9RT
<213> Mus musculus
```

<211> 310 <212> PRT <213> Mus musculus <400> 1995 Met Arg Asn Phe Ser Val Val Thr Gln Phe Ile Leu Leu Gly Ile Pro His Thr Glu Gly Val Glu Ile Met Leu Phe Val Leu Phe Leu Ser Phe 25 Tyr Ile Phe Thr Leu Val Gly Asn Leu Leu Ile Leu Phe Ala Ile Val 40 Ser Ser Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Cys Gln Leu 55 Ser Val Cys Asp Ile Phe Phe Pro Ser Val Ser Ser Pro Lys Met Leu 70 75 Phe Tyr Leu Ser Gly Asn Ser Arg Ala Ile Ser Tyr Thr Gly Cys Val 90 8.5 Cys Gln Leu Phe Phe Tyr His Phe Leu Gly Cys Thr Glu Cys Phe Leu 105 Tyr Thr Val Met Ala Tyr Asp Arg Phe Ile Ala Ile Cys Phe Pro Leu 120 125 Arg Tyr Ser Ile Ile Met Asn His Lys Val Cys Ala Ile Met Ala Val 130 135 Gly Thr Ser Phe Phe Gly Cys Ile Gln Ala Thr Phe Leu Thr Thr Leu 150 155 Thr Phe Gln Leu Pro Tyr Cys Gly Pro Asn Glu Val Asp Tyr Tyr Phe 170 165 Cys Asp Ile Pro Val Met Leu Lys Leu Ala Cys Ala Asp Thr Ser Thr 180 185 Leu Glu Met Val Gly Leu Ile Ser Val Gly Leu Met Pro Leu Ser Cys 200 205 Phe Leu Leu Ile Leu Thr Ser Tyr Ser Phe Ile Leu Cys Ser Ile Leu 215 Gln Ile Arg Ser Thr Glu Gly Arg His Arg Ala Phe Ser Thr Cys Ser 230 235 Ala His Leu Thr Ala Ile Leu Leu Ala Phe Met Pro Val Val Leu Ile 245 250 Tyr Leu Gln Pro Thr Pro Asn Pro Trp Leu Asn Ala Ala Val Gln Val 265 Leu Asn Asn Leu Val Thr Pro Met Leu Asn Pro Leu Ile Tyr Ser Leu 280 285 Arg Asn Lys Glu Val Lys Cys Ser Leu Lys Lys Met Leu Gln Gly 295 Pro Ile Leu Ser Lys Lys

305 310

<210> 1996

<400> 1997

```
<211> 308
<212> PRT
<213> Mus musculus
<400> 1996
Met Gly Thr Gly Asn His Ser Val Thr Val Val Phe Val Leu Val Gly
                                   10
Leu Thr Gln Gln Pro Glu Leu Leu Pro Leu Phe Ile Leu Phe Leu
                               25
Gly Ile Tyr Val Val Thr Ala Val Gly Asn Leu Gly Met Ile Leu Leu
                           40
Ile Thr Val Ser Pro Leu Leu His Thr Pro Met Tyr Tyr Phe Leu Ser
Ser Leu Ser Cys Val Asp Leu Cys Tyr Ser Thr Val Ile Thr Pro Lys
                                       75
Met Leu Val Asn Phe Leu Gly Lys Lys Asn Leu Ile Val Tyr Ser Glu
                                   90
Cys Met Ala Gln Leu Phe Phe Phe Val Ile Phe Val Val Ala Glu Gly
           100
                              105
Tyr Leu Leu Thr Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Arg
                          120
Pro Leu Leu Tyr Asn Val Ile Met Ser Ser Arg Leu Cys Ser Leu Leu
                       135
                                           140
Val Leu Val Ala Phe Ile Leu Gly Phe Val Ser Ala Leu Ala His Thr
                   150
                                       155
Ser Ala Met Met Asn Leu Ser Phe Cys Lys Ser His Val Ile Ser His
              165
                                  170
Tyr Phe Cys Asp Val Leu Pro Leu Leu Asn Leu Ser Cys Ser Asp Ile
           180
                               185
Lys Leu Asn Glu Leu Leu Phe Ile Ile Ala Gly Phe Asn Thr Leu
                           200
Val Pro Thr Leu Ala Val Ala Ile Ser Tyr Val Phe Ile Phe Cys Ser
                       215
                                           220
Ile Leu His Ile Lys Ser Ser Lys Gly Arg Ser Lys Ala Phe Gly Thr
                                       235
Cys Ser Ser His Leu Met Ala Val Gly Ile Phe Phe Gly Ser Ile Thr
                                   250
               245
Phe Met Tyr Phe Lys Pro Pro Ser Ser Asn Ser Leu Glu Glu Glu Lys
                               265
Val Ser Ser Val Phe Tyr Thr Thr Val Ile Pro Met Leu Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Lys Lys Ala Leu Gly Lys Cys
                       295
Leu Ala Gly Arg
305
<210> 1997
<211> 315
<212> PRT
<213> Mus musculus
```

```
Met Gln Val Gln Met Ala Asp Thr Asn His Ser Thr Val Thr Glu Phe
                                    1.0
Ile Leu Ala Gly Leu Thr Asp Lys Pro Glu Leu Gln Leu Pro Leu Phe
                                25
Leu Leu Phe Leu Gly Ile Tyr Leu Leu Thr Val Leu Gly Asn Leu Gly
Met Ile Ile Leu Ile Leu Leu Ser Ser His Leu His Thr Pro Met Tyr
                        55
Phe Phe Leu Ser Ser Leu Ser Phe Ile Asp Leu Cys Tyr Ser Thr Val
Ile Thr Pro Lys Met Leu Val Asn Phe Val Ala Lys Lys Asn Val Ile
               85
                                    90
Ser Tyr Glu Glu Cys Met Thr Gln Leu Tyr Phe Phe Leu Ala Phe Val
                                105
            100
                                                   110
Ile Ser Glu Cys His Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val
                           120
Ala Ile Cys Asn Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Ile
                        135
Cys Ser Trp Met Val Gly Gly Val Tyr Gly Met Gly Leu Ile Gly Ala
                    150
                                        155
Ala Val His Thr Leu Cys Met Leu Arg Val Val Phe Cys Lys Ala Asn
                165
                                    170
Ile Ile Asn His Tyr Phe Cys Asp Leu Phe Pro Leu Met Glu Leu Ala
                               185
Cys Ser Ser Thr Tyr Val Asn Glu Val Val Leu Leu Cys Leu Ser Ala
                            200
Phe Asn Ile Phe Ile Pro Thr Leu Thr Ile Leu Gly Ser Tyr Ile Phe
                        215
                                            220
Ile Ile Ile Ser Ile Leu Arg Ile Lys Ser Thr Glu Gly Arg Phe Lys
                    230
                                        235
Ala Phe Ser Thr Cys Ser Ser His Phe Ser Ala Val Ser Val Phe Phe
                245
                                    250
Gly Ser Leu Ala Phe Met Tyr Leu Gln Pro Phe Ser Val Ser Ser Lys
                                265
Asp Lys Gly Lys Val Ser Ser Val Phe Tyr Thr Thr Ile Val Pro Met
                            280
                                                285
Leu Asn Pro Met Ile Tyr Ser Leu Arg Asn Arg Asp Val Lys Leu Ala
                        295
Leu Asn Lys Leu Phe Gln Lys Lys Phe His Val
                    310
```

```
<210> 1998
<211> 311
<212> PRT
```

<213> Mus musculus

<400> 1998

 Met
 Ala
 Thr
 Gly
 Asn
 Tyr
 Cys
 Met
 Leu
 Pro
 Glu
 Phe
 Ile
 Leu
 Thr
 Gly

 Leu
 Ser
 Lys
 Lys
 Pro
 Gln
 Leu
 Gln
 Met
 Pro
 Leu
 Phe
 Leu
 Ser
 Phe
 Leu
 Phe
 L

```
65
                   70
                                        75
Met Leu Val Asn Phe Val Ile Glu Lys Asn Ile Ile Ser Tyr Thr Gly
                                   90
Cys Met Ala Gln Leu Tyr Phe Phe Leu Ile Phe Ala Ile Ala Glu Cys
                                105
His Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys Asn
                           120
Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Ile Tyr Thr Ser Leu
                       135
Ile Phe Gly Val Tyr Ile Ile Gly Val Val Cys Ala Ser Ala His Thr
                   150
                                       155
Gly Phe Met Ile Arg Ile Gln Phe Cys Asn Leu Glu Val Ile Asn His
               165
                                   170
Tyr Phe Cys Asp Leu Leu Pro Leu Leu Glu Leu Ala His Ser Ser Thr
                               185
           180
Tyr Val Asn Glu Leu Leu Val Leu Cys Phe Gly Thr Phe Asn Ile Val
                           200
Val Pro Thr Met Thr Ile Leu Thr Ser Tyr Ile Phe Ile Ile Ala Asn
                       215
Ile Leu Arg Ile Arg Ser Thr Gly Gly Arg Ser Lys Ala Phe Ser Thr
                   230
                                        235
Cys Ser Ser His Ile Leu Ala Val Ala Val Phe Phe Gly Ser Ala Ala
               245
                                    250
Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp Gln Gly Lys
                                265
           260
Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu
                           280
Ile Tyr Ser Leu Arg Asn Lys Asp Val Ser Val Ala Leu Lys Lys Ile
                      295
Leu Glu Arg Lys Leu Phe Met
```

<211> 315

<212> PRT

<213> Mus musculus

<400> 1999

Met Glu Glu Ile Asn Asp Thr Ser Val Ala Glu Phe Ile Leu Thr Gly 10 Leu Thr Glu Asn Pro Glu Leu Gln Leu Pro Leu Phe Leu Ile Phe Leu 25 Ala Val Tyr Leu Val Thr Val Val Gly Asn Leu Gly Met Ile Val Leu Ile Leu Ile Ser Ser Gln Leu His Thr Pro Met Tyr Tyr Leu Leu Arg 55 Ser Leu Ser Phe Ile Asp Cys Cys Gln Ser Thr Val Ile Ile Pro Lys 75 Met Leu Leu Asn Phe Val Thr Glu Met Asn Ile Ile Ser Tyr Pro Gln 85 90 Cys Ile Ala Gln Phe Tyr Phe Phe Cys Ala Phe Ala Val Ser Glu Cys 105 His Met Leu Ala Ala Met Ala Tyr Asp Arg Tyr Val Ala Ile Ser Asn 120 125 Pro Leu Leu Tyr Asn Val Thr Met Ser Tyr Gln Val Cys Ser Leu Met 135 140

```
Val Ala Val Val Tyr Gly Ile Gly Leu Ile Ser Ala Thr Ala His Thr
                   150
                                      155
Val Phe Leu Leu Arg Val Leu Phe Cys Lys Ser Asp Ile Ile Asn His
                                   170
               165
Tyr Phe Cys Asp Leu Phe Pro Leu Leu Glu Leu Ser Cys Ser Ser Thr
           180
                               185
Tyr Ile Asn Glu Val Leu Ala Leu Ser Phe Ser Ala Phe Asn Ile Ile
                          200
Val Pro Ala Leu Thr Ile Leu Ser Ser Tyr Ile Phe Ile Ile Val Ser
                       215
                                           220
Val Leu His Ile Gln Ser Thr Gly Gly Arg Val Lys Ala Phe Arg Thr
                  230
                                       235
Cys Ser Ser His Ile Met Ala Val Ala Ile Phe Phe Gly Ser Thr Val
                                  250
              245
Phe Met Tyr Leu Gln Pro Ser Ser Val Ser Ser Met Asp Gln Gly Lys
                               265
Val Ser Ser Val Phe Tyr Thr Ile Val Val Pro Met Leu Asn Pro Leu
       275
                           280
                                               285
Ile Tyr Ser Leu Arg Asn Lys Asp Val Arg Val Ser Leu Lys Lys Leu
                       295
Leu Gln Lys Ile Ser Phe Leu Lys Thr Lys Asn
                   310
```

<210> 2000 <211> 314 <212> PRT

<213> Mus musculus

<400> 2000

Met Glu Glu Lys Asn Gln Thr Val Met Pro Glu Phe Leu Phe Leu Gly 1 10 Ile Thr Asp Asn Phe His Gln Lys Ile Val Ile Phe Ile Ile Phe Phe Phe Val Tyr Leu Val Thr Leu Gly Gly Asn Val Gly Met Ile Ala Leu 40 Ile Trp Leu Asp Pro Arg Leu His Thr Pro Met Tyr Phe Phe Leu Ser 55 Gln Leu Ser Phe Val Asp Val Ser Ser Ser Ser Ile Ala Pro Lys 70 75 Met Leu Cys Asp Ile Phe Ala Arg Asn Lys Ala Ile Ser Phe Val Gly 85 90 Cys Ala Ala Gln Met Trp Phe Phe Gly Leu Phe Val Ala Thr Glu Cys 100 105 Phe Leu Leu Ala Ala Met Ala Tyr Asp Arg Tyr Ala Ala Ile Cys Lys 120 Pro Leu Leu Tyr Thr Leu Ile Met Ser Pro His Leu Ser Val Leu Leu 135 Val Ile Gly Pro Tyr Ala Ile Ala Leu Ile Ser Thr Thr His Thr 150 155 Thr Leu Thr Phe Cys Leu Pro Phe Cys Gly Pro Tyr Ile Ile Asn His 165 170 Phe Phe Cys Asp Ile Ser Pro Leu Leu Ser Leu Ala Cys Ser Asp Thr 180 185 His Ile Asn Lys Leu Val Leu Phe Val Leu Ala Gly Thr Val Gly Val 195 200 Leu Ser Gly Leu Ile Ile Leu Val Ser Tyr Val Cys Ile Leu Lys Ala